

Bacterial BLUF domains

Nr.	Species/strain	Group	Accession nr. Uniprot	Accession nr. NCBI	aa nr.	Domains	
1	<i>Enterococcus gallinarum</i> EGD-AAK12	F		ERE59647.1	405	BLUF+EAL	1
2	<i>Actinomycetospira chiangmaiensis</i>	Ac		WP_018332181.1	148	Short-BLUF	2
				WP_018331556.1	175	Short-BLUF	3
				WP_018332897.1	150	Short-BLUF	4
				WP_018331430.1	141	Short-BLUF	5
3	<i>Actinoplanes</i> sp. N902-109	Ac	R4LLI6	YP_007952341.1	135	Short-BLUF	6
4	<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> NCPPB 382	Ac	A5CNT4	YP_001221435.1	142	Short-BLUF	7
			A5CM94	YP_001220898.1	148	Short-BLUF	8
5	<i>Clavibacter michiganensis</i> subsp. <i>nebraskensis</i> NCPPB 2581	Ac	M5B6Z4	YP_007684954.1	142	Short-BLUF	9
			M5B789	YP_007684430.1	139	Short-BLUF	10
6	<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i> ATCC 33113	Ac	B0RBP8		126	Short-BLUF	11
			B0RFL5	YP_001710824.1	142	Short-BLUF	12
7	<i>Corynebacterium efficiens</i> DSM 44549	Ac	Q8FMY2	NP_738977.1	158	Short-BLUF	13
8	<i>Corynebacterium maris</i> DSM 45190	Ac	S5TI47	YP_008371038.1	159	Short-BLUF	14
9	<i>Curtobacterium flaccumfaciens</i>	Ac		WP_017888306.1	142	Short-BLUF	15
				WP_017888712.1	190	Short-BLUF	16
10	<i>Curtobacterium</i> sp. B18	Ac		WP_022907696.1	142	Short-BLUF	17
				WP_022907690.1	156	Short-BLUF	18
	<i>Curtobacterium</i> sp. B8	Ac		WP_022902403.1	109	Short-BLUF	19
				WP_022904642.1	168	Short-BLUF	20
				WP_022902388.1	149	Short-BLUF	21
				WP_022902223.1	139	Short-BLUF	22
11	<i>Dietzia alimentaria</i>	Ac		WP_010540020.1	158	Short-BLUF	23
12	<i>Dietzia</i> sp. UCD-THP	Ac		WP_017837588.1	160	Short-BLUF	24
				WP_017836468.1	158	Short-BLUF	25
13	<i>Ilumatobacter coccineus</i> YM16-304	Ac	M4ZW07	YP_007562816.1	353	BLUF+GGDEF	26
14	<i>Leifsonia xyli</i> subsp. <i>cynodontis</i> DSM 46306	Ac		YP_008579210.1	168	Short-BLUF	27
15	<i>Leifsonia xyli</i> subsp. <i>xyli</i>	Ac	Q6AGS2	YP_061528.1	145	Short-BLUF	28
16	<i>Leucobacter chromiirensistens</i>	Ac		WP_010155083.1	154	Short-BLUF	29
17	<i>Microbacterium maritopicum</i> MF109	Ac	T5KEX1	WP_021201284.1	162	Short-BLUF	30
18	<i>Microbacterium paraoxydans</i>	Ac		WP_018186897.1	149	Short-BLUF	31
				WP_018187668.1	142	Short-BLUF	32
19	<i>Microbacterium</i> sp. 11MF	Ac		WP_020098083.1	149	Short-BLUF	33
				WP_020098408.1	142	Short-BLUF	34
	<i>Microbacterium</i> sp. B19	Ac		WP_022879455.1	146	Short-BLUF	35
	<i>Microbacterium</i> sp. TS-1	Ac		GAD34866.1	156	Short-BLUF	36
	<i>Microbacterium</i> sp. UCD-TDU	Ac		WP_017829376.1	174	Short-BLUF	37
				WP_017829365.1	193	Short-BLUF	38
20	<i>Microbacterium testaceum</i> (strain StLB037)	Ac	E8NB71	YP_004224598.1	145	Short-BLUF	39
21	<i>Afipia</i> sp. 1NLS2	P(α)	D6V881	WP_009340159.1	151	Short-BLUF	40
22	<i>Ahrensia</i> sp. R2A130	P(α)	E0MSP0	WP_009758676.1	125	Short-BLUF	41
23	<i>alpha</i> proteobacterium BAL199	P(α)U	A8TQR5	WP_007672921.1	124	Short-BLUF	42
24	<i>alpha</i> proteobacterium JLT2015	P(α)U	M2T6L9	WP_008603323.1	133	Short-BLUF	43
25	<i>alpha</i> proteobacterium L41A	P(α)U		WP_017506466.1	135	Short-BLUF	44
26	<i>alpha</i> proteobacterium SCGC AAA076-C03	P(α)U		WP_020057179.1	142	Short-BLUF	45
27	<i>alpha</i> proteobacterium SCGC AAA298-K06	P(α)U		WP_020044700.1	140	Short-BLUF	46
28	<i>Amorphus coralli</i>	P(α)		WP_018701439.1	148	Short-BLUF	47
29	<i>Asticcacaulis benevestitus</i>	P(α)		WP_018084049.1	161	Short-BLUF	48
				WP_023447472.1	163	Short-BLUF	49

30	<i>Asticcacaulis biprosthecum</i> C19	P(α)	F4QHK8	WP_006271926.1	122	Short-BLUF	50
31	<i>Asticcacaulis</i> sp. AC460	P(α)		WP_023451483.1	140	Short-BLUF	51
	<i>Asticcacaulis</i> sp. AC466	P(α)		WP_023459633.1	139	Short-BLUF	52
				WP_023456967.1	169	Short-BLUF	53
	<i>Asticcacaulis</i> sp. YBE204	P(α)		WP_023462718.1	148	Short-BLUF	54
32	<i>Aureimonas ureilytica</i>	P(α)		WP_019995874.1	108	Short-BLUF	55
				WP_019998548.1	138	Short-BLUF	56
33	<i>Azospirillum lipoferum</i> (strain 4B)	P(α)	G7ZDG1	YP_004974645.1	163	Short-BLUF	57
			G7Z5P1	YP_005039978.1	161	Short-BLUF	58
34	<i>Blastomonas</i> sp. AAP53	P(α)		WP_017672203.1	135	Short-BLUF	59
35	<i>Bradyrhizobium</i> sp. STM 3809	P(α)	H0SXV9	WP_008961634.1	151	Short-BLUF	60
			H0T8Q2	WP_008965377.1	125	Short-BLUF	61
36	<i>Brevundimonas abyssalis</i> TAR-001	P(α)	U2ZDP3	WP_021697307.1	100	Short-BLUF	62
37	<i>Brevundimonas diminuta</i> 470-4	P(α)	L1QEI8	WP_003168376.1	133	Short-BLUF	63
			L1QGZ1	WP_003168022.1	165	Short-BLUF	64
38	<i>Brevundimonas diminuta</i> ATCC 11568	P(α)	F4QZ49	WP_003166443.1	136	Short-BLUF	65
			F4R104	WP_003166654.1	136	Short-BLUF	66
39	<i>Brevundimonas</i> sp. BAL3	P(α)	B4W666	WP_008261602.1	136	Short-BLUF	67
			B4WEH9	WP_008264082.1	151	Short-BLUF	68
			B4W667	WP_008262982.1	141	Short-BLUF	69
40	<i>Brevundimonas subvibrioides</i> ATCC 15264	P(α)	D9QFJ9	YP_003820137.1	133	Short-BLUF	70
			D9QF25	YP_003818133.1	148	Short-BLUF	71
			D9QJR6	YP_003817291.1	137	Short-BLUF	72
			D9QHQ8	YP_003816957.1	129	Short-BLUF	73
			D9QN89	YP_003817913.1	167	Short-BLUF	74
41	<i>Caenispirillum salinarum</i> AK4	P(α)	K9GNQ3	WP_009542082.1	148	Short-BLUF	75
42	<i>Caulobacter</i> sp. JGI 0001010-J14	P(α)		WP_019847616.1	155	Short-BLUF	76
	<i>Caulobacter</i> sp. JGI 0001013-D04	P(α)		WP_018113275.1	155	Short-BLUF	77
43	<i>Citricella</i> sp. 357	P(α)	I1ASF9	WP_009506357.1	135	Short-BLUF	78
	<i>Citricella</i> sp. SE45	P(α)	D0D5D9	WP_008885899.1	131	Short-BLUF	79
44	<i>Dinoroseobacter shibae</i> DFL 12	P(α)	A8LL23	YP_001534373.1	135	Short-BLUF	80
45	<i>Fodinicurvata sediminis</i>	P(α)		WP_022728487.1	145	Short-BLUF	81
46	<i>Fulvimarina pelagi</i> HTCC2506	P(α)	Q0G5H1	WP_007067067.1	144	Short-BLUF	82
			Q0G0Q7	WP_007068840.1	145	Short-BLUF	83
			Q0G114	WP_007068733.1	122	Short-BLUF	84
47	<i>Henriciella marina</i>	P(α)		WP_018146618.1	137	Short-BLUF	85
				WP_018146679.1	136	Short-BLUF	86
				WP_018147000.1	146	Short-BLUF	87
48	<i>Hoeflea phototrophica</i> DFL-43	P(α)	A9DDP2	WP_007196455.1	130	Short-BLUF	88
49	<i>Hyphomonas neptunium</i> ATCC 15444	P(α)	Q0C3J3	YP_759700.1	152	Short-BLUF	89
50	<i>Jannaschia</i> sp. (strain CCS1)	P(α)	Q28NL5	YP_510722.1	164	Short-BLUF	90
			Q28QR5	YP_509972.1	150	Short-BLUF	91
			Q28M24	YP_511263.1	135	Short-BLUF	92
51	<i>Labrenzia aggregata</i> IAM 12614	P(α)	A0NTY6	WP_006935087.1	152	Short-BLUF	93
52	<i>Labrenzia alexandrii</i> DFL-11	P(α)	B9QVG5	WP_008192786.1	152	Short-BLUF	94
53	<i>Loktanella vestfoldensis</i>	P(α)		WP_019955376.1	138	Short-BLUF	95
	<i>Loktanella vestfoldensis</i> SKA53	P(α)	A3V3H6	WP_007204263.1	136	Short-BLUF	96
54	<i>Magnetospirillum gryphiswaldense</i>	P(α)	A4U007	CAM76214.1	156	Short-BLUF	97
			A4U445	CAM77652.1	151	Short-BLUF	98
55	<i>Maricaulis maris</i> (strain MCS10)	P(α)	Q0AMF1	YP_757480.1	152	Short-BLUF	99
			Q0ALH8	YP_757803.1/NP_949618.1	141	Short-BLUF	100
56	<i>Maricaulis</i> sp. JL2009	P(α)		WP_022699434.1	141	Short-BLUF	101
57	<i>Methylobacterium chloromethanicum</i> CM4	P(α)	B7KRN3	YP_002423488.1/YP_002422117.1	150	Short-BLUF	102

			B7KN60	YP_002423105.1	148	Short-BLUF	103
			B7L1R5	YP_002419387.1	150	Short-BLUF	104
			C5B322	YP_002965329.1	148	Short-BLUF	105
58	<i>Methylobacterium extorquens</i> AM1	P(α)	C5AVI4	YP_002961929.1/YP_001638425.1	155	Short-BLUF	106
			C7CE09	YP_003066731.1/YP_001638425.1	155	Short-BLUF	107
	<i>Methylobacterium extorquens</i> DM4	P(α)	C7CJD7	YP_003070453.1	148	Short-BLUF	108
			H1KED3	WP_003597563.1/YP_002965329.1	148	Short-BLUF	109
	<i>Methylobacterium extorquens</i> DSM 13060	P(α)	H1KPI6	WP_003603713.1/YP_001638425.1	155	Short-BLUF	110
			A9VWG7	YP_001637613.1	150	Short-BLUF	111
	<i>Methylobacterium extorquens</i> PA1	P(α)	A9W8Q2	YP_001641472.1	148	Short-BLUF	112
			A9W198	YP_001638425.1	155	Short-BLUF	113
59	<i>Methylobacterium mesophilicum</i> SR1.6/6	P(α)	M7XWX4	WP_010687537.1	294	BLUF	114
			M7XZR2	WP_010683805.1	155	Short-BLUF	115
60	<i>Methylobacterium nodulans</i> ORS 2060	P(α)	B8IB70	YP_002497588.1	155	Short-BLUF	116
61	<i>Methylobacterium populi</i> ATCC BAA-705	P(α)	B1ZGT3	YP_001927146.1	162	Short-BLUF	117
			B1Z908	YP_001923601.1	155	Short-BLUF	118
62	<i>Methylobacterium radiotolerans</i> ATCC 27329	P(α)	B1M482	YP_001757060.1	309	Short-BLUF	119
			B1M108	YP_001755241.1	139	Short-BLUF	120
			B1LTA6	YP_001753095.1	143	Short-BLUF	121
			B1M0G5	YP_001758170.1	155	Short-BLUF	122
63	<i>Methylobacterium</i> sp. 285MFTsu5.1	P(α)		WP_020092935.1	155	Short-BLUF	123
	<i>Methylobacterium</i> sp. 4-46	P(α)	B0UJP3	YP_001769419.1	150	Short-BLUF	124
			B0ULI8	YP_001770966.1	155	Short-BLUF	125
			B0U8I2	YP_001768746.1	296	Short-BLUF	126
			B0UQT1	YP_001771351.1	162	Short-BLUF	127
			B0UIK0	YP_001770814.1	373	Short-BLUF	128
	<i>Methylobacterium</i> sp. 77	P(α)		WP_019905219.1	155	Short-BLUF	129
	<i>Methylobacterium</i> sp. 88A	P(α)		WP_018045976.1	150	Short-BLUF	130
				WP_018044868.1	155	Short-BLUF	131
	<i>Methylobacterium</i> sp. GXF4	P(α)	I9CMR0	WP_007562637.1	306	Short-BLUF	132
			I9LE30	WP_007566415.1	155	Short-BLUF	133
	<i>Methylobacterium</i> sp. MB200	P(α)		WP_017484131.1	156	Short-BLUF	134
				WP_017487136.1	155	Short-BLUF	135
	<i>Methylobacterium</i> sp. WSM2598	P(α)		WP_018261940.1	290	Short-BLUF	136
64	<i>Methylocystis rosea</i>	P(α)		WP_018408523.1	134	Short-BLUF	137
65	<i>Methylocystis</i> sp. (strain SC2)	P(α)	J7QPQ2	YP_006590526.1	134	Short-BLUF	138
66	<i>Oceanicaulis alexandrii</i>	P(α)		WP_022700825.1	149	Short-BLUF	139
67	<i>Oceaniovalibus guishaninsula</i> JLT2003	P(α)	K2HTA6	WP_007425238.1	138	Short-BLUF	140
68	<i>Octadecabacter antarcticus</i> 307	P(α)	M9RHP8	YP_007706545.1	143	Short-BLUF	141
			M9R7E3	YP_007705193.1	170	Short-BLUF	142
			M9RA14	YP_007705656.1	170	Short-BLUF	143
			M9RGN7	YP_007705589.1	158	Short-BLUF	144
69	<i>Octadecabacter arcticus</i> 238	P(α)	M9RPU8	YP_007699880.1	146	Short-BLUF	145
70	<i>Pannonibacter phragmitetus</i>	P(α)		WP_019963279.1	150	Short-BLUF	146
				WP_019963280.1	152	Short-BLUF	147
71	<i>Paracoccus</i> sp. N5	P(α)		WP_017999944.1	138	Short-BLUF	148
72	<i>Paracoccus zeaxanthinifaciens</i>	P(α)		WP_022708278.1	141	Short-BLUF	149
73	<i>Parvibaculum lavamentivorans</i> DS-1	P(α)	A7HQ46	YP_001411686.1/WP_011995320.1	153	Short-BLUF	150
74	<i>Phaeosporillum molischianum</i> DSM 120	P(α)	H8FX83	WP_002730899.1	150	Short-BLUF	151
75	<i>Phenylobacterium zucineum</i> HLK1	P(α)	B4RAQ0	YP_002132077.1	166	Short-BLUF	152
76	<i>Polymorphum gilvum</i> LMG 25793	P(α)poly	F2J5Y4	YP_004304542.1	156	Short-BLUF	153
77	<i>Porphyrobacter</i> sp. AAP82	P(α)		WP_017663773.1	152	Short-BLUF	154
				WP_017663774.1	130	Short-BLUF	155

78	<i>Pseudovibrio</i> sp. JE062	P(α)	B6R848	WP_008551887.1	152	Short-BLUF	156
79	<i>Puniceispirillum marinum</i> (strain IMCC1322)	P(α)	D5BS69	YP_003551200.1	411	RRF-BLUF	157
80	<i>Rhodobacter</i> sp. AKP1	P(α)	L1KCR3	WP_009563298.1	140	Short-BLUF	158
			L1K965	WP_009564586.1	450	BLUF+SCHICH	159
81	<i>Rhodobacter sphaeroides</i> (<i>Rhodopseudomonas sphaeroides</i>)	P(α)	Q53119	YP_351608.1	450	BLUF+SCHICH	160
	<i>Rhodobacter sphaeroides</i> ATCC 17023/2.4.1	P(α)	Q3J677	YP_351608.1	450	BLUF+SCHICH ^{II}	161
			Q3IV98	YP_345277.1	134	Short-BLUF	162
			Q3IYE4	YP_354341.1/WP_011338827.1	140	Short-BLUF	163
	<i>Rhodobacter sphaeroides</i> ATCC 17025	P(α)	A4WX15	YP_001169234.1	448	BLUF+SCHICH	164
			A4WZZ2	YP_001170261.1	135	Short-BLUF	165
	<i>Rhodobacter sphaeroides</i> ATCC 17029	P(α)	A3PG69	YP_001042107.1	450	BLUF+SCHICH	166
			A3PNV7	YP_001044795.1	140	Short-BLUF	167
	<i>Rhodobacter sphaeroides</i> KD131	P(α)	B9KRZ4	YP_002527323.1	450	BLUF+SCHICH	168
			B9KPY5	YP_002527021.1	128	Short-BLUF	169
	<i>Rhodobacter sphaeroides</i> WS8N	P(α)	F3U4S4	WP_002724946.1	174	BLUF+TETR	170
			F5M0G5	EGJ22762.1/YPP_001044795.1	140	Short-BLUF	171
			F5M357	WP_002722303.1	450	BLUF+SCHICH	172
82	<i>Rhodobacterales bacterium</i> HTCC2255	P(α)	Q0FFK4	WP_008034321.1	142	Short-BLUF	173
	<i>Rhodobacterales bacterium</i> Y4I	P(α)	B6BAZ4	WP_008557343.1	145	Short-BLUF	174
83	<i>Rhodopseudomonas palustris</i> (strain HaA2)	P(α)	Q2J2T2	YP_484139.1	141	Short-BLUF	175
	<i>Rhodopseudomonas palustris</i> BisA53	P(α)	Q07KQ3	YP_782461.1	202	Short-BLUF	176
			Q07NU1	YP_781373.1	172	Short-BLUF	177
			Q07V95	YP_779119.1	146	Short-BLUF	178
			Q07LL8	YP_782146.1	134	Short-BLUF	179
	<i>Rhodopseudomonas palustris</i> BisB18	P(α)	Q211J0	YP_533265.1	225	Short-BLUF	180
			Q21C17	YP_530388.1	147	Short-BLUF	181
			Q214S4	YP_532431.1	131	Short-BLUF	182
	<i>Rhodopseudomonas palustris</i> CGA009	P(α)	Q6NCF0	NP_945875.1	147	Short-BLUF	183
			Q6N1X0	NP_949618.1	157	Short-BLUF	184
			Q6N4H0	NP_948706.1	156	Short-BLUF	185
	<i>Rhodopseudomonas palustris</i> DX-1	P(α)	E6VP72	YP_004108354.1	148	Short-BLUF	186
			E6VKR4	YP_004106926.1	147	Short-BLUF	187
			E6VPR9	YP_004110781.1	157	Short-BLUF	188
	<i>Rhodopseudomonas palustris</i> TIE-1	P(α)	B3QE01	YP_001992821.1	148	Short-BLUF	189
			B3QBC9	YP_001989558.1	147	Short-BLUF	190
			B3Q6V3	YP_001993727.1	157	Short-BLUF	191
84	<i>Rhodopseudomonas</i> sp. B29	P(α)		WP_022723876.1	156	Short-BLUF	192
85	<i>Rhodospirillum centenum</i> ATCC 51521 / SW	P(α)	B6IP78	YP_002298393.1	148	Short-BLUF	193
86	<i>Rhodospirillum photometricum</i> DSM 122	P(α)	H6SMN4	YP_005418139.1	175	Short-BLUF	194
87	<i>Rhodovulum</i> sp. PH10	P(α)	J6UCI9	WP_008388881.1	164	Short-BLUF	195
			J6UF18	WP_008385672.1	144	Short-BLUF	196
88	<i>Robiginitomaculum antarcticum</i>	P(α)		WP_017931728.1	138	Short-BLUF	197
89	<i>Roseibium</i> sp. TrichSKD4	P(α)	E2CEP5	WP_009466697.1	157	Short-BLUF	198
90	<i>Roseobacter denitrificans</i> OCh 114	P(α)	Q169R5	YP_681964.1	131	Short-BLUF	199
91	<i>Roseobacter litoralis</i> OCh 149	P(α)	F7ZIV2	YP_004691975.1	131	Short-BLUF	200
92	<i>Roseobacter</i> sp. AzwK-3b	P(α)	A6FLZ7	WP_007812297.1	138	Short-BLUF	201
	<i>Roseobacter</i> sp. CCS2	P(α)	A4EDL7	WP_008230522.1	158	Short-BLUF	202
			A4EKD4	WP_008234592.1	95	Short-BLUF	203
	<i>Roseobacter</i> sp. GA101	P(α)	B7RMG6	WP_008228573.1	108	Short-BLUF	204
	<i>Roseobacter</i> sp. MED193	P(α)	A3X3E5	WP_009811077.1	146	Short-BLUF	205
	<i>Roseobacter</i> sp. SK209-2-6	P(α)	A4EP54	WP_008203735.1	143	Short-BLUF	206
93	<i>Roseovarius</i> sp. 217	P(α)	A3W442	WP_009816911.1	137	Short-BLUF	207
	<i>Roseovarius</i> sp. HTCC2601	P(α)	Q0FHM9	WP_007792538.1	131	Short-BLUF	208

	<i>Roseovarius</i> sp. TM1035	P(α)	A6E0Y7	WP_008281285.1	137	Short-BLUF	209
94	<i>Rubellimicrobium thermophilum</i> DSM 16684	P(α)	S9QTZ7	WP_021097950.1	142	Short-BLUF	210
95	<i>Sagittula stellata</i> E-37	P(α)	A3JX11	WP_005854872.1	157	Short-BLUF	211
			A3JYT3	WP_005855744.1	177	Short-BLUF	212
96	<i>Silicibacter</i> sp. TrichCH4B	P(α)	C9CW04	WP_009176168.1	144	Short-BLUF	213
			C9CW06	WP_009176303.1	131	Short-BLUF	214
	<i>Silicibacter</i> sp. TM1040	P(α)	Q1GF07	YP_614021.1	144	Short-BLUF	215
			Q1GF09	YP_614019.1	169	Short-BLUF	216
97	<i>Sphingobium baderi</i> LL03	P(α)	T0GMM3	WP_021243582.1	138	Short-BLUF	217
98	<i>Sphingobium chlorophenolicum</i> L-1	P(α)	F6ETZ8	YP_004552311.1	138	Short-BLUF	218
99	<i>Sphingobium indicum</i> B90A	P(α)	I5BF60	WP_007684659.1	138	Short-BLUF	219
100	<i>Sphingobium japonicum</i> BiD32	P(α)	N1MG97	WP_006950198.1	129	Short-BLUF	220
	<i>Sphingobium japonicum</i> NBRC 101211 / UT26S	P(α)	D4Z033	YP_003544577.1	138	Short-BLUF	221
101	<i>Sphingobium lactosutens</i> DS20	P(α)	T0J2S2	WP_021225549.1	133	Short-BLUF	222
102	<i>Sphingobium quisquiliarum</i> P25	P(α)	T0H8I1	WP_021237988.1	127	Short-BLUF	223
103	<i>Sphingobium</i> sp. HDIP04	P(α)	T0G7F1	WP_020818413.1	138	Short-BLUF	224
	<i>Sphingobium</i> sp. YL23	P(α)		WP_022681831.1	139	Short-BLUF	225
				WP_022683884.1	136	Short-BLUF	226
				WP_022682837.1	133	Short-BLUF	227
104	<i>Sphingobium ummariense</i> RL-3	P(α)	T0IST7	WP_021318238.1	137	Short-BLUF	228
105	<i>Sphingobium xenophagum</i>	P(α)		WP_019051433.1	129	Short-BLUF	229
				WP_017182074.1	129	Short-BLUF	230
106	<i>Sphingomonas</i>	P(α)		WP_010164332.1	130	Short-BLUF	231
107	<i>Sphingomonas elodea</i>	P(α)		WP_010543334.1	131	Short-BLUF	232
108	<i>Sphingomonas phyllosphaerae</i>	P(α)		WP_022687793.1	153	Short-BLUF	233
109	<i>Sphingomonas</i> sp. Mn802worker	P(α)		WP_019517102.1	138	Short-BLUF	234
	<i>Sphingomonas</i> sp. PAMC 26605	P(α)		WP_010188000.1	131	Short-BLUF	235
				WP_010187435.1	215	Short-BLUF	236
				WP_010187036.1	135	Short-BLUF	237
				WP_010186219.1	148	Short-BLUF	238
	<i>Sphingomonas</i> sp. PAMC 26617	P(α)		WP_010163859.1	146	Short-BLUF	239
				WP_010164991.1	147	Short-BLUF	240
	<i>Sphingomonas</i> sp. PAMC 26621	P(α)		WP_010219263.1	240	Short-BLUF	241
				WP_010219976.1	148	Short-BLUF	242
				WP_010217326.1	141	Short-BLUF	243
				WP_010219296.1	134	Short-BLUF	244
				WP_010217042.1	165	Short-BLUF	245
				WP_010219603.1	133	Short-BLUF	246
				WP_010219403.1	147	Short-BLUF	247
				WP_010219691.1	140	Short-BLUF	248
				WP_010220036.1	81	Short-BLUF	249
	<i>Sphingomonas</i> sp. S17	P(α)	F3X316	WP_007406954.1	130	Short-BLUF	250
	<i>Sphingomonas</i> sp. SKA58	P(α)	Q1NAZ4	WP_009821301.1	133	Short-BLUF	251
110	<i>Sphingomonas wittichii</i>	P(α)		WP_016746531.1	150	Short-BLUF	252
	<i>Sphingomonas wittichii</i> RW1	P(α)	A5VFD3	YP_001265137.1	164	Short-BLUF	253
111	<i>Sphingomonas-like bacterium</i> B12	P(α)		WP_022691481.1	137	Short-BLUF	254
112	<i>Sphingopyxis alaskensis</i>	P(α)	Q1GWG4	YP_615341.1	141	Short-BLUF	255
113	<i>Sphingopyxis baekryungensis</i>	P(α)		WP_022672508.1	704	GGDEF+EAL+BLUF	256
				WP_022673489.1	136	Short-BLUF	257
114	<i>Sphingopyxis</i> sp. MC1	P(α)	N9WHS2	WP_003038631.1	138	Short-BLUF	258
115	<i>Sulfitobacter guttiiformis</i>	P(α)	J7G2U7	YP_006965188.1	144	Short-BLUF	259
116	<i>Sulfitobacter</i> sp. EE-36	P(α)	A3S970	WP_005850501.1	110	Short-BLUF	260
	<i>Sulfitobacter</i> sp. NAS-14.1	P(α)	A3SU32	WP_009825579.1	110	Short-BLUF	261

117	<i>Variovorax paradoxus</i> B4	P(α)	T1X5J0	YP_008514845.1	134	Short-BLUF	262
118	<i>Achromobacter xylosoxidans</i>	P(β)	F7SWX0	WP_006391283.1	408	BLUF+EAL	263
	<i>Achromobacter xylosoxidans</i> NH44784-1996	P(β)	R4XQI4	YP_008030152.1	408	BLUF+EAL	264
119	<i>Acidovorax avenae</i>	P(β)		WP_019702121.1	140	Short-BLUF	265
	<i>Acidovorax avenae</i> ATCC 19860	P(β)	F0QCG3	YP_004236013.1	140	Short-BLUF	266
			F0Q3D8	YP_004236407.1	137	Short-BLUF	267
120	<i>Acidovorax avenae</i> sub. <i>citrulli</i> AAC00-1	P(β)	A1TT92	YP_971954.1	140	Short-BLUF	268
			A1TUE4	YP_972356.1	137	Short-BLUF	269
121	<i>Acidovorax delafieldii</i> 2AN	P(β)	C5TAV7	WP_005799771.1	140	Short-BLUF	270
			C5TBB6	WP_005799950.1	132	Short-BLUF	271
122	<i>Acidovorax ebreus</i> TPSY	P(β)	B9ME34	YP_002552288.1	140	Short-BLUF	272
123	<i>Acidovorax radicis</i>	P(β)		WP_010466631.1	132	Short-BLUF	273
				WP_010461918.1	140	Short-BLUF	274
				WP_010465348.1	139	Short-BLUF	275
124	<i>Acidovorax</i> sp. CF316	P(β)	J0KJ25	WP_007856976.1	132	Short-BLUF	276
			J1EI97	WP_007855842.1	140	Short-BLUF	277
			J0U4I2	WP_007857182.1	139	Short-BLUF	278
	<i>Acidovorax</i> sp. JS42	P(β)	A1W4E7	YP_985198.1	140	Short-BLUF	279
	<i>Acidovorax</i> sp. KKS102	P(β)	K0IEC4	YP_006856384.1	132	Short-BLUF	280
				YP_006853313.1	140	Short-BLUF	281
			K0I309	YP_006854227.1	139	Short-BLUF	282
	<i>Acidovorax</i> sp. MR-S7	P(β)		WP_020229597.1	140	Short-BLUF	283
	<i>Acidovorax</i> sp. NO-1	P(β)	H0C3A0	WP_008906782.1	139	Short-BLUF	284
			H0BYE8	WP_008905106.1	140	Short-BLUF	285
			H0C4J7	WP_008907226.1	132	Short-BLUF	286
125	<i>Alicyciphilus denitrificans</i> DSM 14773	P(β)	F4G8R2	YP_004386855.1	140	Short-BLUF	287
	<i>Alicyciphilus denitrificans</i> JCM 14587	P(β)	E8U0X9	YP_004125618.1	140	Short-BLUF	288
126	<i>beta proteobacterium</i> KB13	P(β)U	B6BTG8	WP_009852483.1	135	Short-BLUF	289
127	<i>beta proteobacterium</i> L13	P(β)		WP_017509222.1	142	Short-BLUF	290
128	<i>Betaproteobacteria bacterium</i> MOLA814	P(β)Unc		WP_023472146.1	141	Short-BLUF	291
129	<i>Bordetella avium</i> (strain 197N)	P(β)	Q2L1Z3	YP_786068.1	421	BLUF+EAL	292
130	<i>Brachymonas chironomi</i>	P(β)		WP_018715076.1	140	Short-BLUF	293
131	<i>Burkholderia bryophila</i>	P(β)		WP_020069946.1	171	Short-BLUF	294
132	<i>Burkholderia</i> sp. CCGE1003	P(β)	E1TCW7	YP_003907473.1	174	Short-BLUF	295
133	<i>Burkholderiales bacterium</i> JOSHI_001	P(β)	H5WUY1	WP_009548903.1	143	Short-BLUF	296
			H5WRM6	WP_009552427.1	157	Short-BLUF	297
			H5WLF9	WP_009549831.1	142	Short-BLUF	298
			H5WT39	WP_009553481.1	137	Short-BLUF	299
134	<i>Caldimonas manganoxidans</i>	P(β)		WP_019560888.1	143	Short-BLUF	300
135	<i>Chromobacterium violaceum</i>	P(β)	Q7NSR1	NP_903029.1	141	Short-BLUF	301
136	<i>Comamonadaceae bacterium</i> CR	P(β)		YP_008681716.1	140	Short-BLUF	302
				YP_008682224.1	144	Short-BLUF	303
137	<i>Comamonas testosteroni</i> (strain CNB-2)	P(β)	D0J3Z8	YP_003277487.1	135	Short-BLUF	304
			D0J4M9	YP_003277583.1	131	Short-BLUF	305
	<i>Comamonas testosteroni</i> ATCC 11996	P(β)	H1RQ19	WP_003076132.1	132	Short-BLUF	306
	<i>Comamonas testosteroni</i> S44	P(β)	D8DEA6	WP_003071555.1	132	Short-BLUF	307
138	<i>Cupriavidus basilensis</i> OR16	P(β)	H1S5P4	WP_006158738.1	147	Short-BLUF	308
139	<i>Cupriavidus necator</i> ATCC 17699	P(β)	Q0JZS4	YP_841480.1	147	Short-BLUF	309
	<i>Cupriavidus necator</i> ATCC 43291	P(β)	F8GRM4	YP_004682121.1	147	Short-BLUF	310
140	<i>Cupriavidus</i> sp. BIS7	P(β)		WP_019447941.1	147	Short-BLUF	311
	<i>Cupriavidus</i> sp. HMR-1	P(β)	L2ELR6	WP_008643847.1	147	Short-BLUF	312
	<i>Cupriavidus</i> sp. HPC(L)	P(β)	K6B9H2	WP_006577586.1	147	Short-BLUF	313
	<i>Cupriavidus</i> sp. UYPR2.512	P(β)		WP_018308878.1	147	Short-BLUF	314

	<i>Cupriavidus sp. WS</i>	P(β)		WP_020204073.1	147	Short-BLUF	315
141	<i>Cupriavidus taiwanensis</i>	P(β)		WP_018008408.1	147	Short-BLUF	316
	<i>Cupriavidus taiwanensis</i> LMG 19424	P(β)	B3RBI8	YP_002008317.1	147	Short-BLUF	317
142	<i>Curvibacter lanceolatus</i>	P(β)		WP_019576065.1	140	Short-BLUF	318
	<i>Curvibacter lanceolatus</i>	P(β)		WP_019577548.1	140	Short-BLUF	319
143	<i>Curvibacter putative symbiont of Hydra magnipapillata</i>	P(β)	C9Y8H7	CBA27840.1	156	Short-BLUF	320
			C9Y9E1	CBA28480.1	425	BLUF+EAL	321
			C9YG67	CBA33160.1	77	Short-BLUF	322
144	<i>Delftia acidovorans</i> SPH-1	P(β)	A9BX41	YP_001565411.1	133	Short-BLUF	323
145	<i>Delftia sp. (strain Cs1-4)</i>	P(β)	F6ALE0	YP_004488022.1	133	Short-BLUF	324
146	<i>Duganella zoogloeoides</i>	P(β)		WP_019920955.1	141	Short-BLUF	325
147	<i>Herbaspirillum frisingense</i> GSF30	P(β)	R0FSP4	WP_006463383.1	141	Short-BLUF	326
148	<i>Herbaspirillum lusitanum</i>	P(β)		WP_016833369.1	141	Short-BLUF	327
149	<i>Herbaspirillum seropedicae</i>	P(β)		WP_017452789.1	141	Short-BLUF	328
	<i>Herbaspirillum seropedicae</i> (strain SmR1)	P(β)	D8IY84	YP_003778114.1	141	Short-BLUF	329
150	<i>Herbaspirillum sp. CF444</i>	P(β)	J3D4X2	WP_007882396.1	141	Short-BLUF	330
	<i>Herbaspirillum sp. GW103</i>	P(β)	I3CM34	WP_008333777.1	141	Short-BLUF	331
	<i>Herbaspirillum sp. YR522</i>	P(β)	J3CNJ7	WP_008112004.1	141	Short-BLUF	332
151	<i>Herminiimonas arsenicoxydans</i>	P(β)	A4G7R3	CAL62550.2	116	Short-BLUF	333
152	<i>Hydrogenophaga sp. PBC</i>	P(β)		WP_009520410.1	140	Short-BLUF	334
153	<i>Janthinobacterium lividum</i>	P(β)		WP_010396398.1	135	Short-BLUF	335
				WP_010399694.1	141	Short-BLUF	336
154	<i>Janthinobacterium sp. CG3</i>	P(β)		WP_017879051.1	136	Short-BLUF	337
155	<i>Leptothrix cholodnii</i> SP-6	P(β)	B1XZW9	YP_001790861.1	141	Short-BLUF	338
156	<i>Limnobacter sp. MED105</i>	P(β)	A6GT96	WP_008252022.1	157	Short-BLUF	339
			A6GT66	WP_008251962.1	134	Short-BLUF	340
157	<i>Limnohabitans sp. Rim28</i>	P(β)		WP_019425978.1	147	Short-BLUF	341
				WP_019426427.1	140	Short-BLUF	342
	<i>Limnohabitans sp. Rim47</i>	P(β)		WP_019429110.1	147	Short-BLUF	343
				WP_019430089.1	140	Short-BLUF	344
158	<i>Methylibium petroleiphilum</i> (strain PM1)	P(β)	A2SEP7	YP_001020271.1	142	Short-BLUF	345
			A2SHW7	YP_001021391.1	97	Short-BLUF	346
159	<i>Methylothermobacter mobilis</i>	P(β)		WP_019897538.1	138	Short-BLUF	347
				WP_019896887.1	159	Short-BLUF	348
	<i>Methylothermobacter mobilis</i> JLW8	P(β)	C6WT83	YP_003049672.1	162	Short-BLUF	349
160	<i>Methylothermobacter sp. 301</i>	P(β)	D7DKL3	YP_003675036.1	137	Short-BLUF	350
			D7DLZ8	YP_003675269.1	199	Short-BLUF	351
161	<i>Methylothermobacter sp. NVD</i>	P(β)		WP_018410763.1	140	Short-BLUF	352
162	<i>Methylothermobacter universalis</i>	P(β)		WP_018230298.1	140	Short-BLUF	353
				WP_020164190.1	147	Short-BLUF	354
				WP_018229736.1	141	Short-BLUF	355
	<i>Methylothermobacter universalis</i> FAM5	P(β)	F5RDI2	WP_008061871.1	140	Short-BLUF	356
			F5RC20	WP_008060661.1	141	Short-BLUF	357
163	<i>Oxalobacteraceae bacterium</i> IMCC9480	P(β)	F1VUP6	WP_009664611.1	141	Short-BLUF	358
	<i>Oxalobacteraceae bacterium</i> JGI 0001004-K23	P(β)		WP_018058743.1	141	Short-BLUF	359
164	<i>Polaromonas naphthalenivorans</i> CJ2	P(β)	A1VKQ2	YP_981151.1	140	Short-BLUF	360
			A1VJM4	YP_980773.1	134	Short-BLUF	361
165	<i>Polaromonas sp. CF318</i>	P(β)	J2LWR4	WP_007863266.1	135	Short-BLUF	362
			J2U008	WP_007867959.1	140	Short-BLUF	363
			J2UJU6	WP_007862374.1	135	Short-BLUF	364
	<i>Polaromonas sp. strain JS666</i>	P(β)	Q12F66	YP_547724.1	140	Short-BLUF	365
			Q12FR6	YP_547524.1	135	Short-BLUF	366
166	<i>Polynucleobacter necessarius</i> STIR1	P(β)	B1XTH8	YP_001797269.1	135	Short-BLUF	367

167	<i>Polynucleobacter</i> sp. QLW-P1DMWA-1	P(β)	A4SVS3	YP_001155151.1	135	Short-BLUF	368
168	<i>Pseudogulbenkiania ferrooxidans</i> EGD-HP2	P(β)	U1AEJ0	WP_021475086.1	141	Short-BLUF	369
169	<i>Ralstonia eutropha</i> H16	P(β)	Q0JZS4	CAJ96750.1/YP_841480.1	147	Short-BLUF	370
	<i>Ralstonia eutropha</i> JMP134	P(β)	Q46V06	YP_297872.1	147	Short-BLUF	371
170	<i>Ralstonia metallidurans</i> CH34	P(β)	Q1LG69	YP_586126.1	147	Short-BLUF	372
171	<i>Ralstonia pickettii</i> DTP0602	P(β)		YP_008600000.1	147	Short-BLUF	373
172	<i>Ralstonia</i> sp. GA3-3	P(β)	R7XF66	EON18032.1/YP_841480.1	147	Short-BLUF	374
173	<i>Ramlibacter tataouinensis</i> DSM 14655	P(β)	F5XYH6	YP_004619171.1	225	Short-BLUF	375
			F5XWS2	YP_004620235.1	140	Short-BLUF	376
174	<i>Rhodocyclaceae</i> bacterium RZ94	P(β)		WP_019918775.1	144	Short-BLUF	377
175	<i>Rhodoferax ferrireducens</i> DSM 15236	P(β)	Q21YW7	YP_522567.1	140	Short-BLUF	378
176	<i>Rubrivivax benzoatilyticus</i> JA2	P(β)	F3LLG6	WP_009855751.1	141	Short-BLUF	379
			F3LQM5	WP_009857208.1	187	Short-BLUF	380
177	<i>Rubrivivax gelatinosus</i> (strain NBRC 100245 / IL144)	P(β)	I0HNG0	YP_005436046.1	151	Short-BLUF	381
			I0HXR5	YP_005439301.1	141	Short-BLUF	382
178	<i>Thauera</i> sp. 27	P(β)	N6YS95	WP_002936113.1	779	PAS+GGDEF+EAL+BLUF	383
179	<i>Thiomonas intermedia</i> K12	P(β)	D5X5X2	YP_003642355.1	159	Short-BLUF	384
180	<i>Variovorax paradoxus</i>	P(β)		WP_019654574.1	135	Short-BLUF	385
				WP_019656584.1	140	Short-BLUF	386
	<i>Variovorax paradoxus</i> (strain EPS)	P(β)	E6UYP4	YP_004157058.1	140	Short-BLUF	387
			E6UZL0	YP_004155929.1	140	Short-BLUF	388
			E6UVP8	YP_004153392.1	134	Short-BLUF	389
	<i>Variovorax paradoxus</i> B4	P(β)	T1XG74	YP_008518022.1	140	Short-BLUF	390
	<i>Variovorax paradoxus</i> S110	P(β)	C5CWX4	YP_002945997.1	140	Short-BLUF	391
			C5CNN1	YP_002942913.1	134	Short-BLUF	392
	<i>Variovorax</i> sp. CF313	P(β)	J2TF58	WP_007831506.1	138	Short-BLUF	393
				WP_007837143.1	140	Short-BLUF	394
181	<i>Verminephrobacter aporrectodeae</i>	P(β)		WP_010101101.1	140	Short-BLUF	395
182	<i>Verminephrobacter eiseniae</i> strain EF01-2	P(β)	A1WMH3	YP_997848.1	133	Short-BLUF	396
			A1WHJ0	YP_996115.1	142	Short-BLUF	397
183	<i>Acinetobacter</i>	P(γ)		WP_017398952.1	147	Short-BLUF	398
184	<i>Acinetobacter baumannii</i>	P(γ)	B9UN50	ACJ61333.1	125	Short-BLUF	399
				WP_000383195.1	156	Short-BLUF	400
				WP_001102891.1	156	Short-BLUF	401
				WP_019205050.1	110	Short-BLUF	402
	<i>Acinetobacter baumannii</i> ATCC 17978	P(γ)	A3M6V8	ABO12652.2/YP_001847089.1	156	Short-BLUF	403
	<i>Acinetobacter baumannii</i> 6013113	P(γ)	F5IG55	EGJ62365.1/YP_001713224.1	156	Short-BLUF	404
	<i>Acinetobacter baumannii</i> 6013150	P(γ)	F5I0V4	EGJ59752.1/YP_001713224.1	156	Short-BLUF	405
	<i>Acinetobacter baumannii</i> 6014059	P(γ)	F5INK0	EGJ67557.1/YP_001847089.1	156	Short-BLUF	406
	<i>Acinetobacter baumannii</i> AA-014	P(γ)	L9MMX8	ELW87667.1/YP_001847089.1	156	Short-BLUF	407
	<i>Acinetobacter baumannii</i> AB0057	P(γ)	B7IC80	YP_002319929.1	146	Short-BLUF	408
	<i>Acinetobacter baumannii</i> Ab11111	P(γ)	K1KNL6	EKB33264.1/YP_001847089.1	156	Short-BLUF	409
	<i>Acinetobacter baumannii</i> AB210	P(γ)	F5JQ04	EGK47564.1/YP_001847089.1	156	Short-BLUF	410
	<i>Acinetobacter baumannii</i> AB307-0294	P(γ)	B7H0C4	YP_002325120.1	156	Short-BLUF	411
	<i>Acinetobacter baumannii</i> Ab33333	P(γ)	K1L153	EKB37999.1/YP_001847089.1	156	Short-BLUF	412
	<i>Acinetobacter baumannii</i> Ab44444	P(γ)	K1LDN5	EKB42599.1/YP_001847089.1	156	Short-BLUF	413
	<i>Acinetobacter baumannii</i> ABNIH1	P(γ)	F9I778	EGT96279.1/YP_001847089.1	156	Short-BLUF	414
	<i>Acinetobacter baumannii</i> ABNIH10	P(γ)	M8FRG3	EMU01204.1/YP_001713224.1	156	Short-BLUF	415
	<i>Acinetobacter baumannii</i> ABNIH11	P(γ)	M8FCJ0	EMU03061.1/YP_001713224.1	156	Short-BLUF	416
	<i>Acinetobacter baumannii</i> ABNIH13	P(γ)	M8G623	EMU12871.1/YP_001847089.1	156	Short-BLUF	417
	<i>Acinetobacter baumannii</i> ABNIH14	P(γ)	M8G600	EMU15902.1/YP_001847089.1	156	Short-BLUF	418
	<i>Acinetobacter baumannii</i> ABNIH15	P(γ)	M8GPL3	EMU19730.1/YP_001847089.1	156	Short-BLUF	419
	<i>Acinetobacter baumannii</i> ABNIH16	P(γ)	M8HH59	EMU18738.1/YP_001847089.1	156	Short-BLUF	420

Acinetobacter baumannii ABNIH17	P(y)	M8I2R0	EMU36405.1/YP_001847089.1	156	Short-BLUF	421
Acinetobacter baumannii ABNIH18	P(y)	M8HM77	EMU34022.1/YP_001847089.1	156	Short-BLUF	422
Acinetobacter baumannii ABNIH19	P(y)	M8IIQ3	EMU31648.1/YP_001713224.1	156	Short-BLUF	423
Acinetobacter baumannii ABNIH2	P(y)	F9IL05	EGT94630.1/YP_001847089.1	156	Short-BLUF	424
Acinetobacter baumannii ABNIH20	P(y)	M8HYS5	EMU38102.1/YP_001847089.1	156	Short-BLUF	425
Acinetobacter baumannii ABNIH22	P(y)	M8IRW2	EMU37704.1/YP_001847089.1	156	Short-BLUF	426
Acinetobacter baumannii ABNIH23	P(y)	M8INV0	EMU43935.1/YP_001847089.1	156	Short-BLUF	427
Acinetobacter baumannii ABNIH24	P(y)	M8JP20	EMU48679.1/YP_001847089.1	156	Short-BLUF	428
Acinetobacter baumannii ABNIH25	P(y)	M8E8P5	EMT89469.1/YP_001847089.1	156	Short-BLUF	429
Acinetobacter baumannii ABNIH26	P(y)	M8ENA7	EMT84227.1/YP_001847089.1	156	Short-BLUF	430
Acinetobacter baumannii ABNIH3	P(y)	F9J0C3	EGT93760.1/YP_001847089.1	156	Short-BLUF	431
Acinetobacter baumannii ABNIH4	P(y)	F9J5J3	EGU03419.1/YP_001847089.1	156	Short-BLUF	432
Acinetobacter baumannii ABNIH5	P(y)	M8E7N4	EMT89085.1/YP_001847089.1	156	Short-BLUF	433
Acinetobacter baumannii ABNIH6	P(y)	M8FRA0	EMT97557.1/YP_001713224.1	156	Short-BLUF	434
Acinetobacter baumannii ABNIH7	P(y)	M8EIC5	EMT95636.1/YP_001713224.1	156	Short-BLUF	435
Acinetobacter baumannii AC12	P(y)	J2Z674	EJN44155.1/YP_001847089.1	156	Short-BLUF	436
Acinetobacter baumannii AC30	P(y)	K6HQG6	EKO44813.1/YP_001847089.1	156	Short-BLUF	437
Acinetobacter baumannii ACICU	P(y)	B2HUF8	YP_001847089.1	156	Short-BLUF	438
Acinetobacter baumannii ANC 4097	P(y)	N9KTG4	ENW69199.1/YP_001713224.1	156	Short-BLUF	439
Acinetobacter baumannii ATCC 19606	P(y)	D0C5R9	EEX04334.1/YP_007596771.1	156	Short-BLUF	440
Acinetobacter baumannii AYE	P(y)	B0V7Y7	YP_001713224.1	156	Short-BLUF	441
Acinetobacter baumannii BJAB0715	P(y)	S5CPN1	YP_008217774.1	156	Short-BLUF	442
Acinetobacter baumannii Canada BC-5	P(y)	J4JC81	EJO38969.1/YP_001713224.1	156	Short-BLUF	443
Acinetobacter baumannii Canada BC1	P(y)	K6MXH5	EKP56108.1/YP_001713224.1	156	Short-BLUF	444
Acinetobacter baumannii D1279779	P(y)	M4QZE8	AGH36110.1/YP_007596771.1	156	Short-BLUF	445
Acinetobacter baumannii IS-116	P(y)	K1F8S0	EKA67743.1/YP_001847089.1	156	Short-BLUF	446
Acinetobacter baumannii IS-123	P(y)	J4ZJ36	EJO37798.1/WP_001102890.1	156	Short-BLUF	447
Acinetobacter baumannii IS-143	P(y)	K1F3U0	EKA73961.1/YP_001847089.1	156	Short-BLUF	448
Acinetobacter baumannii IS-235	P(y)	K5EGT2	EKK05136.1/YP_001713224.1	156	Short-BLUF	449
Acinetobacter baumannii IS-251	P(y)	K5EN29	EKK16599.1/YP_001713224.1	156	Short-BLUF	450
Acinetobacter baumannii IS-58	P(y)	K1F7X7	EKA77090.1/YP_001713224.1	156	Short-BLUF	451
Acinetobacter baumannii MDR-TJ	P(y)	I1XZ18	AFI94904.1/YP_001847089.1	156	Short-BLUF	452
Acinetobacter baumannii MDR-ZJ06	P(y)	G2JJV4	YP_005526514.1/YP_001847089.1	156	Short-BLUF	453
Acinetobacter baumannii MSP4-16	P(y)	M2Z5Q5	EME56213.1/YP_007596771.1	156	Short-BLUF	454
Acinetobacter baumannii Naval-113	P(y)	K9C0B8	EKU64146.1/YP_001847089.1	156	Short-BLUF	455
Acinetobacter baumannii Naval-13	P(y)	K5PLW1	EKL51476.1/WP_001102890.1	156	Short-BLUF	456
Acinetobacter baumannii Naval-17	P(y)	J1MTN3	EJG29655.1/YP_001847089.1	156	Short-BLUF	457
Acinetobacter baumannii Naval-18	P(y)	J4UB75	EJP50580.1/WP_001102890.1	156	Short-BLUF	458
Acinetobacter baumannii Naval-2	P(y)	K6M6A9	EKP46927.1/YP_001847089.1	156	Short-BLUF	459
Acinetobacter baumannii Naval-21	P(y)	K6N8V9	EKP54045.1/YP_001713224.1	156	Short-BLUF	460
Acinetobacter baumannii Naval-57	P(y)	L9P2K2	ELX05830.1/YP_007596771.1	156	Short-BLUF	461
Acinetobacter baumannii Naval-72	P(y)	K5EE33	EKK13424.1/YP_001847089.1	156	Short-BLUF	462
Acinetobacter baumannii Naval-78	P(y)	L9NMD3	ELX00539.1/YP_001847089.1	156	Short-BLUF	463
Acinetobacter baumannii Naval-81	P(y)	K4YNM4	EJP60409.1/WP_001102890.1	156	Short-BLUF	464
Acinetobacter baumannii Naval-82	P(y)	K6NY26	EKP62400.1/YP_007596771.1	156	Short-BLUF	465
Acinetobacter baumannii Naval-83	P(y)	K5Q641	EKL58786.1/YP_001713224.1	156	Short-BLUF	466
Acinetobacter baumannii NIPH 1362	P(y)	N8TB24	ENU55812.1/YP_001847089.1	156	Short-BLUF	467
Acinetobacter baumannii NIPH 146	P(y)	N8TY29	ENU64868.1/WP_001102890.1	156	Short-BLUF	468
Acinetobacter baumannii NIPH 1669	P(y)	N8SXZ9	ENU51242.1/WP_001102890.1	156	Short-BLUF	469
Acinetobacter baumannii NIPH 1734	P(y)	N8V464	ENU77902/WP_001102890.1	156	Short-BLUF	470
Acinetobacter baumannii NIPH 190	P(y)	N8YY11	ENV26434.1/YP_007596771.1	156	Short-BLUF	471
Acinetobacter baumannii NIPH 201	P(y)	N9GPE0	ENW36793.1/YP_001847089.1	156	Short-BLUF	472
Acinetobacter baumannii NIPH 2061	P(y)	N8UQL2	ENU72709.1/YP_001847089.1	156	Short-BLUF	473

Acinetobacter baumannii NIPH 24	P(γ)	N8NHZ5	ENU14041.1/YP_001847089.1	156	Short-BLUF	474
Acinetobacter baumannii NIPH 290	P(γ)	N9KFC5	ENW64524.1/YP_001713224.1	156	Short-BLUF	475
Acinetobacter baumannii NIPH 329	P(γ)	N9IN83	ENW45510.1/WP_002132039.1	156	Short-BLUF	476
Acinetobacter baumannii NIPH 329	P(γ)	N9II22	ENW43700.1/WP_004708845.1	147	Short-BLUF	477
Acinetobacter baumannii NIPH 335	P(γ)	N9IRT6	ENW44164.1/YP_001847089.1	156	Short-BLUF	478
Acinetobacter baumannii NIPH 410	P(γ)	S3TXG4	WP_016653868.1	156	Short-BLUF	479
Acinetobacter baumannii NIPH 527	P(γ)	N9GQH5	ENW37177.1/YP_001713224.1	156	Short-BLUF	480
Acinetobacter baumannii NIPH 528	P(γ)	N9JTB2	ENW57311.1/YP_001847089.1	156	Short-BLUF	481
Acinetobacter baumannii NIPH 60	P(γ)	N8ZBA3	ENV30959/WP_001102890.1	156	Short-BLUF	482
Acinetobacter baumannii NIPH 601	P(γ)	N9HY38	ENW52033.1/YP_007596771.1	156	Short-BLUF	483
Acinetobacter baumannii NIPH 615	P(γ)	N8U9R8	ENU68973.1/WP_001102890.1	156	Short-BLUF	484
Acinetobacter baumannii NIPH 67	P(γ)	N9J4Z4	WP_005131310.1	156	Short-BLUF	485
Acinetobacter baumannii NIPH 70	P(γ)	N9KCX5	ENW63679.1/YP_001847089.1	156	Short-BLUF	486
Acinetobacter baumannii NIPH 80	P(γ)	N9L2Z3	WP_005138547.1	156	Short-BLUF	487
Acinetobacter baumannii OIFC0162	P(γ)	K5ET94	EKK09161.1/WP_001102887.1	156	Short-BLUF	488
Acinetobacter baumannii OIFC021	P(γ)	L9MFF6	ELW84997.1/WP_002049354.1	156	Short-BLUF	489
Acinetobacter baumannii OIFC021	P(γ)	L9M8U5	ELW83379.1/WP_002050218.1	141	Short-BLUF	490
Acinetobacter baumannii OIFC032	P(γ)	J5I903	EJP41595.1/WP_001102890.1	156	Short-BLUF	491
Acinetobacter baumannii OIFC035	P(γ)	K6NZL3	EKP69017.1/WP_002132039.1	156	Short-BLUF	492
Acinetobacter baumannii OIFC035	P(γ)	K6NTF7	EKP66878.1/WP_002050218.1	141	Short-BLUF	493
Acinetobacter baumannii OIFC047	P(γ)	L9NCI1	ELW97145.1/WP_001102887.1	156	Short-BLUF	494
Acinetobacter baumannii OIFC065	P(γ)	K6LT01	EKP36620.1/YP_001847089.1	156	Short-BLUF	495
Acinetobacter baumannii OIFC074	P(γ)	K5Q9S4	EKL46135.1/YP_001713224.1	156	Short-BLUF	496
Acinetobacter baumannii OIFC087	P(γ)	K6LPN9	EKP41027.1/WP_001102890.1	156	Short-BLUF	497
Acinetobacter baumannii OIFC098	P(γ)	K5PV19	EKL41434.1/YP_001847089.1	156	Short-BLUF	498
Acinetobacter baumannii OIFC099	P(γ)	K6LQV6	EKP41452.1/WP_001102890.1	156	Short-BLUF	499
Acinetobacter baumannii OIFC109	P(γ)	J0TMG8	EJG27711.1/WP_001102890.1	156	Short-BLUF	500
Acinetobacter baumannii OIFC110	P(γ)	K5RVQ7	EKL57522.1/YP_001847089.1	156	Short-BLUF	501
Acinetobacter baumannii OIFC111	P(γ)	K6M4D7	EKP46227.1/YP_001847089.1	156	Short-BLUF	502
Acinetobacter baumannii OIFC137	P(γ)	J0S923	EJG10461.1/WP_001102890.1	156	Short-BLUF	503
Acinetobacter baumannii OIFC143	P(γ)	J0T757	EJG19269.1/WP_001102890.1	156	Short-BLUF	504
Acinetobacter baumannii OIFC180	P(γ)	K5RHA5	EKL52712.1/YP_001847089.1	156	Short-BLUF	505
Acinetobacter baumannii OIFC189	P(γ)	J0SZ83	EJG19316.1/YP_001847089.1	156	Short-BLUF	506
Acinetobacter baumannii OIFC338	P(γ)	L9N142	ELW92889.1/YP_001847089.1	156	Short-BLUF	507
Acinetobacter baumannii strain 1656-2	P(γ)	E8PHF0	YP_001847089.1	156	Short-BLUF	508
Acinetobacter baumannii TCDC-AB0715	P(γ)	F0QKL9	YP_005799504.1/YP_001847089.1	156	Short-BLUF	509
Acinetobacter baumannii TYTH-1	P(γ)	K0HGX0	AFU38785.1/YP_001847089.1	156	Short-BLUF	510
Acinetobacter baumannii WC-136	P(γ)	K9CVT9	WP_002115327.1	156	Short-BLUF	511
Acinetobacter baumannii WC-136	P(γ)	K9CRD3	WP_002115633.1	141	Short-BLUF	512
Acinetobacter baumannii WC-141	P(γ)	K9A8F1	WP_009389951.1	156	Short-BLUF	513
Acinetobacter baumannii WC-141	P(γ)	K8ZYY4	WP_009387234.1	141	Short-BLUF	514
Acinetobacter baumannii WC-323	P(γ)	K9BIS2	EKU54817/WP_005230460.1	156	Short-BLUF	515
Acinetobacter baumannii WC-323	P(γ)	K9BM26	WP_009511737.1	155	Short-BLUF	516
Acinetobacter baumannii WC-323	P(γ)	K9B986	WP_009515481.1	147	Short-BLUF	517
Acinetobacter baumannii WC-323	P(γ)	K9BC39	WP_009511693.1	149	Short-BLUF	518
Acinetobacter baumannii WC-348	P(γ)	K9B241	EKU53718.1/WP_001102887.1	156	Short-BLUF	519
Acinetobacter baumannii WC-487	P(γ)	K9AXM6	EKU51999/WP_006580584.1	156	Short-BLUF	520
Acinetobacter baumannii WC-487	P(γ)	K9BLE6	EKU60294.1/WP_002050218.1	141	Short-BLUF	521
Acinetobacter baumannii WC-692	P(γ)	K1ESG1	EKA71749.1/YP_001847089.1	156	Short-BLUF	522
Acinetobacter baumannii WC-A-694	P(γ)	K6MFE1	EKP63369.1/WP_001102890.1	156	Short-BLUF	523
Acinetobacter baumannii WC-A-92	P(γ)	L9M673	WP_001102886.1	156	Short-BLUF	524
Acinetobacter baumannii ZWS1122	P(γ)	K2ILA9	EKE59799.1/YP_001847089.1	156	Short-BLUF	525
Acinetobacter baumannii ZWS1219	P(γ)	K2HQ55	EKE59891.1/YP_001847089.1	156	Short-BLUF	526

185	<i>Acinetobacter baylyi</i> DSM 14961 = CIP 107474	P(γ)	N9B659	YP_046740.1	155	Short-BLUF	527
			N9BCT4	WP_004927632.1	148	Short-BLUF	528
			N9BED0	YP_046178.1	149	Short-BLUF	529
			N8ZXW2	WP_004927624.1	155	Short-BLUF	530
186	<i>Acinetobacter beijerinckii</i> ANC 3835	P(γ)	N9FTS1	WP_005051584.1	157	Short-BLUF	531
			N9F6Z4	WP_005055777.1	155	Short-BLUF	532
			N9FJQ5	WP_005054245.1	138	Short-BLUF	533
			N9FDZ0	WP_005055778.1	149	Short-BLUF	534
	<i>Acinetobacter beijerinckii</i> CIP 110307	P(γ)	N9FHE8	WP_005059436.1	157	Short-BLUF	535
187	<i>Acinetobacter bereziniae</i> CIP 70.12	P(γ)	N9F616	WP_005029839.1	155	Short-BLUF	536
			N9F7L1	ENW00876.1/WP_004830862.1	147	Short-BLUF	537
			N9DPW4	WP_005029837.1	149	Short-BLUF	538
	<i>Acinetobacter bereziniae</i> NIPH 3	P(γ)	N8YPM4	ENV21180.1/WP_004831317.1	155	Short-BLUF	539
			N8YQK9	ENV21525.1/WP_004830862.1	147	Short-BLUF	540
			N8YIN9	ENV21179.1/WP_004831316.1	149	Short-BLUF	541
188	<i>Acinetobacter calcoaceticus</i>	P(γ)		WP_017392001.1	156	Short-BLUF	542
				WP_017392001.1	156	Short-BLUF	543
				WP_017480957.1	89	Short-BLUF	544
	<i>Acinetobacter calcoaceticus</i> (strain PHEA-2)	P(γ)	F0KGE8	YP_004995739.1	141	Short-BLUF	545
			F0KII1	ADY82317.1/YP_004995999.1	156	Short-BLUF	546
	<i>Acinetobacter calcoaceticus</i> ANC 3680	P(γ)	N9EC09	WP_005039435.1	156	Short-BLUF	547
	<i>Acinetobacter calcoaceticus</i> ANC 3811	P(γ)	R8Y6J9	WP_016137597.1	156	Short-BLUF	548
			R8Y874	WP_016138168.1	161	Short-BLUF	549
	<i>Acinetobacter calcoaceticus</i> DSM 30006 = CIP 81.8	P(γ)	N9F0B6	ENV98323.1/WP_004643428.1	156	Short-BLUF	550
	<i>Acinetobacter calcoaceticus</i> NIPH 13	P(γ)	N8PJK1	ENU09837.1/WP_004643428.1	156	Short-BLUF	551
	<i>Acinetobacter calcoaceticus</i> RUH2202	P(γ)	D0S286	WP_003650777.1	156	Short-BLUF	552
189	<i>Acinetobacter gerneri</i>	P(γ)	N8YFI2	WP_004871730.1	157	Short-BLUF	553
190	<i>Acinetobacter guillouiae</i> CIP 63.46	P(γ)	N8S7G3	ENU59170.1/WP_004719325.1	142	Short-BLUF	554
			N8THK4	ENU57977.1/WP_004721233.1	155	Short-BLUF	555
			N8S437	WP_004721230.1	149	Short-BLUF	556
	<i>Acinetobacter guillouiae</i> MSP4-18	P(γ)	S3Z3U9	EPH37159.1/WP_004719325.1	142	Short-BLUF	557
			S3ZKX5	EPH38960.1/WP_004721233.1	155	Short-BLUF	558
	<i>Acinetobacter guillouiae</i> NIPH 991	P(γ)	N8WUW8	WP_004822451.1	142	Short-BLUF	559
			N8WXK7	WP_004820747.1	155	Short-BLUF	560
			N8YB72	WP_004820748.1	149	Short-BLUF	561
191	<i>Acinetobacter gyllenbergii</i>	P(γ)		WP_023269848.1	147	Short-BLUF	562
				WP_023269642.1	155	Short-BLUF	563
	<i>Acinetobacter gyllenbergii</i> CIP 110306	P(γ)	S3PY91	EPF83591.1/WP_016539987.1	155	Short-BLUF	564
			S3PP26	EPF88044.1/WP_016540194.1	147	Short-BLUF	565
	<i>Acinetobacter gyllenbergii</i> MTCC 11365	P(γ)	S3YW62	EPH35666.1/WP_016539987.1	155	Short-BLUF	566
			S3ZBX9	EPH35880.1/WP_016540194.1	147	Short-BLUF	567
192	<i>Acinetobacter haemolyticus</i> ATCC 19194	P(γ)	D4XPD9	WP_004638534.1	128	Short-BLUF	568
	<i>Acinetobacter haemolyticus</i> CIP 64.3	P(γ)	N9F599	WP_005082086.1	141	Short-BLUF	569
	<i>Acinetobacter haemolyticus</i> NIPH 261	P(γ)	N9GP72	WP_005090981.1	141	Short-BLUF	570
193	<i>Acinetobacter indicus</i> ANC 4215	P(γ)	S3N2L2	WP_016659098.1	144	Short-BLUF	571
194	<i>Acinetobacter johnsonii</i> ANC 3681	P(γ)	N9CQ68	WP_004982048.1	141	Short-BLUF	572
	<i>Acinetobacter johnsonii</i> CIP 64.6	P(γ)	N8RTR2	WP_004696426.1	141	Short-BLUF	573
	<i>Acinetobacter johnsonii</i> SH046	P(γ)	D0SCH6	WP_005400678.1	156	Short-BLUF	574
195	<i>Acinetobacter lwoffii</i>	P(γ)		WP_010327040.1	141	Short-BLUF	575
				WP_016806942.1	156	Short-BLUF	576
	<i>Acinetobacter lwoffii</i> CIP 70.31	P(γ)	N9HDC8	ENW29835.1/WP_004278796.1	143	Short-BLUF	577
			N9H602	ENW27250.1/WP_005104921.1	157	Short-BLUF	578
			N9G8Z9	WP_005102339.1	149	Short-BLUF	579

	<i>Acinetobacter lwoffii</i> NCTC 5866 = CIP 64.10	P(γ)	N9FL15	ENW23433.1/WP_005097246.1	143	Short-BLUF	580
			N9FRT2	ENW25392.1/WP_004281912.1	157	Short-BLUF	581
	<i>Acinetobacter lwoffii</i> NIPH 478	P(γ)	N9GA40	WP_005106614.1	143	Short-BLUF	582
			N9G1N1	ENW28923 /WP_004281912.1	157	Short-BLUF	583
	<i>Acinetobacter lwoffii</i> NIPH 715	P(γ)	N8TVU5	ENU62389.1/WP_004278796.1	143	Short-BLUF	584
			N8TZW9	ENU64062.1/WP_004729009.1	157	Short-BLUF	585
	<i>Acinetobacter lwoffii</i> SH145	P(γ)	D0SQ9	EEY88544.1/WP_004281912.1	157	Short-BLUF	586
			D0ST39	EEY90693.1/WP_004278796.1	143	Short-BLUF	587
196	<i>Acinetobacter nectaris</i>	P(γ)		WP_023272517.1	164	Short-BLUF	588
				WP_023274063.1	154	Short-BLUF	589
197	<i>Acinetobacter nosocomialis</i>	P(γ)		WP_006581725.1	150	Short-BLUF	590
				WP_017398279.1	158	Short-BLUF	591
				WP_016804882.1	192	Short-BLUF	592
				WP_017392774.1	158	Short-BLUF	593
	<i>Acinetobacter nosocomialis</i> Ab22222	P(γ)	K2PWD6	WP_006580584.1	156	Short-BLUF	594
			K2PVW2	WP_006581982.1	147	Short-BLUF	595
	<i>Acinetobacter nosocomialis</i> NIPH 2119	P(γ)	N8RB52	ENU48161/WP_002049354.1	156	Short-BLUF	596
			N8SP20	ENU47659.1/WP_004708845.1	147	Short-BLUF	597
	<i>Acinetobacter nosocomialis</i> NIPH 386	P(γ)	N8YWQ6	WP_004886335.1	156	Short-BLUF	598
			N8YS47	ENV39612.1/WP_004708845.1	147	Short-BLUF	599
198	<i>Acinetobacter oleivorans</i>	P(γ)		WP_023274242.1	147	Short-BLUF	600
199	<i>Acinetobacter parvus</i> DSM 16617 = CIP 108168	P(γ)	N8QCF2	WP_004682504.1	142	Short-BLUF	601
200	<i>Acinetobacter pittii</i>	P(γ)		WP_023187856.1	141	Short-BLUF	602
	<i>Acinetobacter pittii</i> ANC 3678	P(γ)	N9G3B5	WP_005068354.1	156	Short-BLUF	603
			N9ENJ6	WP_005068879.1	147	Short-BLUF	604
	<i>Acinetobacter pittii</i> ANC 4050	P(γ)	R8YQG3	WP_016140521.1	156	Short-BLUF	605
			R8YMS0	WP_016140719.1	147	Short-BLUF	606
	<i>Acinetobacter pittii</i> ANC 4052	P(γ)	R8YV96	WP_016145865.1	156	Short-BLUF	607
			R8YV13	WP_016145659.1	147	Short-BLUF	608
	<i>Acinetobacter pittii</i> CIP 70.29	P(γ)	N9EK11	YP_004995999.1	156	Short-BLUF	609
			N9EKQ9	WP_005073889.1	147	Short-BLUF	610
201	<i>Acinetobacter radioresistens</i>	P(γ)		WP_017401064.1	208	Short-BLUF	611
				WP_017401136.1	185	Short-BLUF	612
	<i>Acinetobacter radioresistens</i> DSM 6976	P(γ)	K6W0U9	WP_005404197.1	140	Short-BLUF	613
			K6VGN5	ENV88969.1/WP_005025739.1	146	Short-BLUF	614
			K6UYR6	WP_005025735.1	147	Short-BLUF	615
			K6UIB5	WP_005025720.1	158	Short-BLUF	616
	<i>Acinetobacter radioresistens</i> NIPH 2130	P(γ)	N9E4V1	WP_005014499.1	146	Short-BLUF	617
			N9DVX6	WP_005019483.1	146	Short-BLUF	618
			N9E4J8	WP_005014506.1	147	Short-BLUF	619
	<i>Acinetobacter radioresistens</i> SH164	P(γ)	D0T1D2	EEY87475.1/WP_005014499.1	146	Short-BLUF	620
			D0T5A8	EEY86881.1/WP_005019483.1	146	Short-BLUF	621
			D0T1Y5	EEY87678.1/WP_005404197.1	140	Short-BLUF	622
			D0T1A1	WP_005404152.1	152	Short-BLUF	623
			D0T1D4	WP_005404170.1	154	Short-BLUF	624
			D0T1E1	WP_005014522.1	118	Short-BLUF	625
	<i>Acinetobacter radioresistens</i> SK82	P(γ)	C6RNE8	EET82638.1/WP_005404197.1	140	Short-BLUF	626
			C6RPU2	WP_005405185.1	148	Short-BLUF	627
			C6RLZ1	EET83186.1/WP_005014522.1	118	Short-BLUF	628
			C6RQ12	EET82088.1/WP_005019483.1	146	Short-BLUF	629
			C6RLZ9	EET83194.1/WP_005014499.1	146	Short-BLUF	630
			C6RLZ8	EET83193.1/WP_005014506.1	147	Short-BLUF	631
	<i>Acinetobacter radioresistens</i> WC-A-157	P(γ)	J4ZH05	WP_005405555.1	140	Short-BLUF	632

			J4ZPX4	EJO37381.1/WP_005025739.1	146	Short-BLUF	633
			J4Z2C2	WP_005407064.1	146	Short-BLUF	634
			J4JB98	WP_005405508.1	148	Short-BLUF	635
			J4ZHC1	WP_005405601.1	158	Short-BLUF	636
202	<i>Acinetobacter schindleri</i> CIP 107287	P(γ)	N9AFC9	WP_004892906.1	142	Short-BLUF	637
			N8ZAE4	ENV45921.1/WP_004897488.1	156	Short-BLUF	638
	<i>Acinetobacter schindleri</i> NIPH 900	P(γ)	N8XZD8	ENV12748.1/WP_004815687.1	142	Short-BLUF	639
			N8WNA0	WP_004813968.1	156	Short-BLUF	640
203	<i>Acinetobacter soli</i> CIP 110264	P(γ)	N9BKH9	WP_004938488.1	155	Short-BLUF	641
			N9A8X8	WP_004937197.1	148	Short-BLUF	642
			N9BMU6	ENV57428.1/WP_004937200.1	148	Short-BLUF	643
			N9BJV1	WP_004938129.1	155	Short-BLUF	644
			N9A568	ENV56437.1/WP_004938066.1	152	Short-BLUF	645
	<i>Acinetobacter soli</i> CIP 110264	P(γ)	N9A5P2	ENV56587.1/WP_004938485.1	150	Short-BLUF	646
	<i>Acinetobacter soli</i> NIPH 2899	P(γ)	N9AFQ3	WP_004947954.1	155	Short-BLUF	647
			N9AFF8	WP_004946942.1	148	Short-BLUF	648
			N9BN22	ENV59724.1/WP_004937200.1	148	Short-BLUF	649
			N9AFI2	ENV60082.1/WP_004938066.1	152	Short-BLUF	650
			N9AGU9	ENV60181.1/WP_004938485.1	150	Short-BLUF	651
204	<i>Acinetobacter</i> sp. 93A2	P(γ)	Q933L6	YP_046178.1	149	Short-BLUF	652
	<i>Acinetobacter</i> sp. ADP1	P(γ)	Q6FAI1	YP_046754.1	149	Short-BLUF	653
			Q6FAJ5	CAG68918.1/YP_046740.1	155	Short-BLUF	654
			Q6FAH9	YP_046756.1	163	Short-BLUF	655
			Q7BC36	CAG68356.1/YP_046178.1	149	Short-BLUF	656
	<i>Acinetobacter</i> sp. ANC 3880	P(γ)	N9T085	ENX57062.1/WP_005189133.1	155	Short-BLUF	657
			N9T0N2	ENX56900.1/WP_004807238.1	148	Short-BLUF	658
			N9RGG2	ENX57063.1/WP_005189145.1	149	Short-BLUF	659
	<i>Acinetobacter</i> sp. ANC 3929	P(γ)	N9LK71	WP_005152839.1	147	Short-BLUF	660
	<i>Acinetobacter</i> sp. ANC 3994	P(γ)	N8QCC6	WP_004648902.1	145	Short-BLUF	661
	<i>Acinetobacter</i> sp. ANC 4105	P(γ)	N9MQW8	ENW92349.1/WP_005189133.1	155	Short-BLUF	662
			N9L7C0	WP_005188667.1	148	Short-BLUF	663
			N9MGG1	ENW92350.1/WP_005189145.1	149	Short-BLUF	664
	<i>Acinetobacter</i> sp. ATCC 27244	P(γ)	C0VK32	WP_008940976.1	141	Short-BLUF	665
	<i>Acinetobacter</i> sp. CIP 101934	P(γ)	N9NFB7	ENX00710.1/WP_004815687.1	142	Short-BLUF	666
			N9NKY1	ENX03417.1/WP_004897488.1	156	Short-BLUF	667
	<i>Acinetobacter</i> sp. CIP 101966	P(γ)	N9P0F1	WP_005263266.1	143	Short-BLUF	668
			N9NWM1	ENX25468/WP_005104921.1	157	Short-BLUF	669
	<i>Acinetobacter</i> sp. CIP 102082	P(γ)	N8WM85	ENU96377.1/WP_004757740.1	142	Short-BLUF	670
	<i>Acinetobacter</i> sp. CIP 102129	P(γ)	N8VLK0	WP_004761518.1	142	Short-BLUF	671
	<i>Acinetobacter</i> sp. CIP 102136	P(γ)	N9PPP9	WP_005252160.1	143	Short-BLUF	672
			N9NCH2	ENX18668.1/WP_004729009.1	157	Short-BLUF	673
	<i>Acinetobacter</i> sp. CIP 102143	P(γ)	N9TH59	ENX62685.1/WP_004757740.1	142	Short-BLUF	674
	<i>Acinetobacter</i> sp. CIP 102159	P(γ)	N8U5M8	ENU82816.1/WP_004757740.1	142	Short-BLUF	675
	<i>Acinetobacter</i> sp. CIP 102529	P(γ)	N8UNT2	ENU89135.1/WP_004757740.1	142	Short-BLUF	676
	<i>Acinetobacter</i> sp. CIP 102637	P(γ)	N8XF19	WP_004799395.1	142	Short-BLUF	677
	<i>Acinetobacter</i> sp. CIP 110321	P(γ)	R9AZG9	WP_016163638.1	148	Short-BLUF	678
	<i>Acinetobacter</i> sp. CIP 51.11	P(γ)	N9MYK0	WP_005247271.1	143	Short-BLUF	679
			N9N647	WP_005245564.1	157	Short-BLUF	680
	<i>Acinetobacter</i> sp. CIP 53.82	P(γ)	N9MHW6	WP_005178747.1	144	Short-BLUF	681
	<i>Acinetobacter</i> sp. CIP 56.2	P(γ)	N8XEK4	ENV07524.1/WP_004807238.1	148	Short-BLUF	682
	<i>Acinetobacter</i> sp. CIP 64.2	P(γ)	N9N2S2	WP_005241169.1	155	Short-BLUF	683
			N9PKT7	WP_005241451.1	147	Short-BLUF	684
			N9PKB9	WP_005241167.1	148	Short-BLUF	685

	<i>Acinetobacter</i> sp. CIP 64.7	P(γ)	N9QVJ7	ENX30917.1/WP_004278796.1	143	Short-BLUF	686
			N9QHH3	ENX26357.1/WP_004729009.1	157	Short-BLUF	687
	<i>Acinetobacter</i> sp. CIP 70.18	P(γ)	N9ST00	ENX57771.1/WP_005189133.1	155	Short-BLUF	688
			N9T3L2	ENX57935.1/WP_004807238.1	148	Short-BLUF	689
	<i>Acinetobacter</i> sp. CIP A162	P(γ)	N8Q5C3	WP_004645416.1	143	Short-BLUF	690
			N8Q0C9	ENU15332.1/WP_004281912.1	157	Short-BLUF	691
	<i>Acinetobacter</i> sp. COS3	P(γ)		WP_023013276.1	148	Short-BLUF	692
	<i>Acinetobacter</i> sp. DR1	P(γ)	D8JK77	YP_003732271.1	161	Short-BLUF	693
			D8JFY6	YP_003731440.1	156	Short-BLUF	694
	<i>Acinetobacter</i> sp. GG2	P(γ)		WP_019458416.1	156	Short-BLUF	695
				WP_019459106.1	161	Short-BLUF	696
	<i>Acinetobacter</i> sp. HA	P(γ)	I4ZUE1	EIM39833.1/WP_004815687.1	142	Short-BLUF	697
			I4ZQ16	WP_008306942.1	156	Short-BLUF	698
	<i>Acinetobacter</i> sp. MDS7A	P(γ)		WP_019836199.1	157	Short-BLUF	699
	<i>Acinetobacter</i> sp. NBRC 100985	P(γ)	G7GFE4	WP_007482358.1	148	Short-BLUF	700
			G7GDM0	WP_007481279.1	155	Short-BLUF	701
	<i>Acinetobacter</i> sp. NIPH 1847	P(γ)	N9NUS5	ENX05670.1/WP_005230460.1	156	Short-BLUF	702
			N9MA43	WP_005230039.1	153	Short-BLUF	703
			N9MAQ2	WP_005230366.1	147	Short-BLUF	704
			N9NRU6	WP_005230037.1	149	Short-BLUF	705
	<i>Acinetobacter</i> sp. NIPH 1859	P(γ)	N9R7K2	WP_005270554.1	147	Short-BLUF	706
	<i>Acinetobacter</i> sp. NIPH 1867	P(γ)	N9R0C8	WP_005211997.1	155	Short-BLUF	707
			N9SKL2	WP_005212260.1	148	Short-BLUF	708
			N9SJJ0	WP_005211995.1	149	Short-BLUF	709
	<i>Acinetobacter</i> sp. NIPH 2036	P(γ)	S3T8J5	WP_016652452.1	147	Short-BLUF	710
	<i>Acinetobacter</i> sp. NIPH 2100	P(γ)	N9RFY9	WP_005293946.1	147	Short-BLUF	711
	<i>Acinetobacter</i> sp. NIPH 2168	P(γ)	N9Q857	WP_005257675.1	156	Short-BLUF	712
			N9Q7N9	WP_005257454.1	147	Short-BLUF	713
	<i>Acinetobacter</i> sp. NIPH 2171	P(γ)	N9MH86	WP_005236029.1	143	Short-BLUF	714
			N9MRD9	ENX11134/WP_004780330.1	156	Short-BLUF	715
			N9MLJ6	ENX09453.1/WP_004782875.1	146	Short-BLUF	716
			N9P2N4	WP_005235635.1	147	Short-BLUF	717
	<i>Acinetobacter</i> sp. NIPH 3623	P(γ)	N9RE67	ENX36920.1/WP_005230460.1	156	Short-BLUF	718
			N9PWE1	WP_005285390.1	155	Short-BLUF	719
			N9PX04	WP_005285742.1	147	Short-BLUF	720
			N9PWA3	WP_005285387.1	149	Short-BLUF	721
	<i>Acinetobacter</i> sp. NIPH 542	P(γ)	N9RMM9	WP_005306937.1	156	Short-BLUF	722
			N9QI40	WP_005305097.1	147	Short-BLUF	723
	<i>Acinetobacter</i> sp. NIPH 713	P(γ)	N9KUS9	ENW87773.1/WP_005097246.1	143	Short-BLUF	724
			N9KN55	WP_005173613.1	149	Short-BLUF	725
	<i>Acinetobacter</i> sp. NIPH 758	P(γ)	N8UVT4	WP_004772199.1	156	Short-BLUF	726
			N8W7V8	WP_004772105.1	147	Short-BLUF	727
	<i>Acinetobacter</i> sp. NIPH 809	P(γ)	N8QJS9	WP_004653704.1	155	Short-BLUF	728
			N8QQ22	WP_004653401.1	147	Short-BLUF	729
			N8QQ45	WP_004653706.1	149	Short-BLUF	730
	<i>Acinetobacter</i> sp. NIPH 817	P(γ)	N8VUX6	WP_004791296.1	156	Short-BLUF	731
			N8VSG1	WP_004792481.1	161	Short-BLUF	732
	<i>Acinetobacter</i> sp. NIPH 899	P(γ)	N8WTX6	WP_004783886.1	143	Short-BLUF	733
			N8VMF9	ENV00711.1/WP_004780330.1	156	Short-BLUF	734
			N8VIL1	ENU99395.1/WP_004782875.1	146	Short-BLUF	735
	<i>Acinetobacter</i> sp. NIPH 973	P(γ)	N8SCA4	WP_004700647.1	156	Short-BLUF	736
	<i>Acinetobacter</i> sp. P8-3-8	P(γ)		WP_010115938.1	149	Short-BLUF	737
	<i>Acinetobacter</i> sp. RUH2624	P(γ)	D0BZX2	EEEX00046.1/WP_004708845.1	147	Short-BLUF	738

			D0BX54	EEX01065.1/WP_006580584.1	156	Short-BLUF	739
	<i>Acinetobacter</i> sp. SH024	P(γ)	D6JU40	EFF86339.1/WP_002115327.1	156	Short-BLUF	740
			D6JTD2	WP_005803474.1	147	Short-BLUF	741
	<i>Acinetobacter</i> sp. WC-743	P(γ)	L9MH55	ELW86565.1/WP_004831317.1	155	Short-BLUF	742
			L9ME93	ELW84587.1/WP_004830862.1	147	Short-BLUF	743
			L9ME60	WP_009585312.1	147	Short-BLUF	744
			L9MHY5	ELW86514.1/WP_004831316.1	149	Short-BLUF	745
205	<i>Acinetobacter tandoii</i> DSM 14970 = CIP 107469	P(γ)	R9B235	WP_016166413.1	140	Short-BLUF	746
206	<i>Acinetobacter ursingii</i> ANC 3649	P(γ)	N9DFL6	WP_005004065.1	141	Short-BLUF	747
			N9DGY2	WP_005002881.1	155	Short-BLUF	748
	<i>Acinetobacter ursingii</i> DSM 16037 = CIP 107286	P(γ)	N9D109	WP_004989315.1	141	Short-BLUF	749
			N9D4M0	ENV75720.1/WP_004990933.1	155	Short-BLUF	750
	<i>Acinetobacter ursingii</i> NIPH 706	P(γ)	N9QSA7	WP_004997440.1	141	Short-BLUF	751
			N9QT74	ENX49024.1/WP_004990933.1	155	Short-BLUF	752
207	<i>Acinetobacter venetianus</i>	P(γ)		WP_017196667.1	147	Short-BLUF	753
				WP_019384317.1	148	Short-BLUF	754
	<i>Acinetobacter venetianus</i> RAG-1 = CIP 110063	P(γ)	N8ZT40	WP_004879195.1	148	Short-BLUF	755
208	<i>Algicola sagamiensis</i>	P(γ)		WP_018691603.1	138	Short-BLUF	756
				WP_018694364.1	138	Short-BLUF	757
				WP_018694365.1	140	Short-BLUF	758
209	<i>Alishewanella agri</i> BL06	P(γ)	I9DUG2	WP_008983735.1	137	Short-BLUF	759
210	<i>Alishewanella jeotgali</i> KCTC 22429	P(γ)	H3ZIX1	WP_008951845.1	137	Short-BLUF	760
211	<i>Allochromatium vinosum</i> DSM 180	P(γ)	D3RRS9	YP_003443015.1	1124	PAS+GGDEF+EAL+BLUF	761
			D3RMV8	YP_003444278.1	143	Short-BLUF	762
212	<i>Alteromonadales bacterium</i> TW-7	P(γ)	A0XX52	WP_006791331.1	141	Short-BLUF	763
214	<i>Alteromonas macleodii</i> 'Deep ecotype'	P(γ)	F2G2W2	AEA96322.1/YP_004425320.1	390	BLUF+EAL	764
	<i>Alteromonas macleodii</i> (strain Balearic Sea AD45)	P(γ)	K0EAG8	YP_006801094.1	395	BLUF+EAL	765
	<i>Alteromonas macleodii</i> (strain Black Sea 11)	P(γ)	K0CTD4	YP_006823174.1	395	BLUF+EAL	766
	<i>Alteromonas macleodii</i> (strain English Channel 673)	P(γ)	K0CJN8	YP_006797210.1	395	BLUF+EAL	767
	<i>Alteromonas macleodii</i> AltDE1	P(γ)	K7RG75	YP_004425320.1	390	BLUF+EAL	768
	<i>Alteromonas macleodii</i> ATCC 27126	P(γ)	J9Y701	YP_006746245.1	405	BLUF+EAL	769
	<i>Alteromonas macleodii</i> str. 'Aegean Sea MED64'	P(γ)	S5ATU0	AGP80153.1	390	BLUF+EAL	770
	<i>Alteromonas macleodii</i> str. 'Ionian Sea U4'	P(γ)	S5AU17	YP_008170230.1	405	BLUF+EAL	771
	<i>Alteromonas macleodii</i> str. 'Ionian Sea U8'	P(γ)	S5BLE9	YP_008170230.1	405	BLUF+EAL	772
215	<i>Beggiatoa</i> sp. PS	P(γ)	A7BT71	EDN70265.1	350	BLUF+Cyclase	773
216	<i>Bermanella marisrubri</i>	P(γ)	Q1N3J0	WP_007018774.1	163	Short-BLUF	774
217	<i>Cedecea davisae</i>	P(γ)		WP_016535954.1	401	BLUF+EAL	775
218	<i>Cellvibrio</i> sp. BR	P(γ)	I3IDC4	WP_007638332.1	179	Short-BLUF	776
219	<i>Citrobacter freundii</i> 4_7_47CFAA	P(γ)	G9SK57	WP_003833502.1	409	BLUF+EAL	777
	<i>Citrobacter freundii</i> ATCC 8090 = MTCC 1658	P(γ)	K8QN37	WP_003841532.1	409	BLUF+EAL	778
	<i>Citrobacter freundii</i> GTC 09479	P(γ)	M3DUI2	WP_003844033.1	409	BLUF+EAL	779
	<i>Citrobacter freundii</i> GTC 09629	P(γ)	R1HFL0	EOD62395.1/WP_003020858.1	409	BLUF+EAL	780
220	<i>Citrobacter rodentium</i> (strain ICC168)	P(γ)	D2TIH4	YP_003365120.1	406	BLUF+ EAL	781
221	<i>Citrobacter</i> sp. 30_2	P(γ)	C1M5D7	WP_008784992.1	409	BLUF+ EAL	782
	<i>Citrobacter</i> sp. A1	P(γ)	J0M453	EJF22671.1/WP_003020858.1	409	BLUF+EAL	783
	<i>Citrobacter</i> sp. KTE151	P(γ)	R8WTE8	WP_016153346.1	403	BLUF+EAL	784
	<i>Citrobacter</i> sp. KTE30	P(γ)	R8UVC4	WP_016150366.1	409	BLUF+EAL	785
	<i>Citrobacter</i> sp. KTE32	P(γ)	R8V9S4	WP_016156768.1	403	BLUF+EAL	786
	<i>Citrobacter</i> sp. L17	P(γ)	K8ZLA8	EKU35574.1/WP_003020858.1	409	BLUF+EAL	787
222	<i>Citrobacter youngae</i> ATCC 29220	P(γ)	D4B8N0	WP_006684233.1	403	BLUF+ EAL	788
223	<i>Congregibacter litoralis</i> KT71	P(γ)U	A4A4X0	EAQ98841.1/WP_008294319.1	160	Short-BLUF	789
			A4ACN4	WP_008296304.1	120	Short-BLUF	790
			A4A4X0	EAQ98841.1/WP_008294319.1	160	Short-BLUF	791

224	<i>Cronobacter dublinensis</i> 1210	P(y)	K8AWY9	WP_007716320.1	404	BLUF+EAL	792
	<i>Cronobacter dublinensis</i> 582	P(y)	K8AXH9	WP_007750072.1	404	BLUF+EAL	793
225	<i>Cronobacter sakazakii</i> E899	P(y)	F5VN29	WP_004387288.1	403	BLUF+EAL	794
226	<i>Cronobacter turicensis</i> 564	P(y)	K8BZ68	WP_007767450.1	362	BLUF+EAL	795
	<i>Cronobacter turicensis</i> DSM 18703 / LMG 23827 / z3032	P(y)	C9XVD7	YP_003211056.1	404	BLUF+ EAL	796
			C9Y5C1	YP_003212605.1	405	BLUF+ EAL	797
227	<i>Ectothiorhodospira</i> sp. PHS-1	P(y)	H1G5T1	WP_008932735.1	1090	PAS+GGDEF+EAL+BLUF	798
228	<i>Endozoicomonas elysicola</i>	P(y)		WP_020581308.1	159	Short-BLUF	799
229	<i>Enhydrobacter aerosaccus</i> SK60	P(y)	C8PY76	WP_007116298.1	190	Short-BLUF	800
			C8PVS3	WP_007115447.1	168	Short-BLUF	801
			C8PY73	WP_007116295.1	143	Short-BLUF	802
			C8Q1B6	WP_007117385.1	217	Short-BLUF	803
			C8PX01	WP_007115875.1	192	Short-BLUF	804
			C8PY74	WP_007116296.1	191	Short-BLUF	805
230	<i>Enterobacter cloacae</i> subsp. <i>Cloacae</i> strain ATCC 13047	P(y)	D5CBV1	YP_003612864.1	406	BLUF+ EAL	806
231	<i>Enterobacter</i> sp. 638	P(y)	A4WAH8	YP_001176759.1	406	BLUF+ EAL	807
			A4W9Q6	YP_001176487.1/NP_415681.1	418	BLUF+ EAL	808
232	<i>Enterobacter aerogenes</i>	P(y)		WP_020079328.1	403	BLUF+EAL	809
	<i>Enterobacter aerogenes</i> ATCC 13048	P(y)	G0EBP4	YP_004593064.1	403	BLUF+EAL	810
	<i>Enterobacter aerogenes</i> EA1509E	P(y)	L8BJB1	YP_007388638.1	403	BLUF+EAL	811
233	<i>Enterobacter asburiae</i> (strain LF7a)	P(y)	G2SAH3	YP_004828302.1	406	BLUF+EAL	812
			G2S426	YP_004828705.1	404	BLUF+EAL	813
234	<i>Enterobacter cancerogenus</i> ATCC 35316	P(y)	D2ZBH9	WP_006174898.1	406	BLUF+ EAL	814
235	<i>Enterobacter cloacae</i>	P(y)		WP_023305984.1	406	BLUF+EAL	815
				WP_023299928.1	406	BLUF+EAL	816
				WP_023311325.1	406	BLUF+EAL	817
				WP_023478840.1	410	BLUF+EAL	818
				WP_017457087.1	407	BLUF+EAL	819
				WP_017456801.1	406	BLUF+EAL	820
236	<i>Enterobacter cloacae</i> complex	P(y)		WP_022647870.1	406	BLUF+EAL	821
				WP_023292651.1	406	BLUF+EAL	822
	<i>Enterobacter cloacae</i> EC_38VIM1	P(y)	S9ZFC8	WP_021241106.1	406	BLUF+EAL	823
	<i>Enterobacter cloacae</i> EcWSU1	P(y)	G8LLE0	YP_004951716.1	406	BLUF+EAL	824
237	<i>Enterobacter cloacae</i> subsp. <i>cloacae</i> ENHKU01	P(y)	J7GAN8	YP_006578373.1	406	BLUF+EAL	825
	<i>Enterobacter cloacae</i> subsp. <i>cloacae</i> GS1	P(y)	I4ZKI1	WP_003857746.1	406	BLUF+EAL	826
	<i>Enterobacter cloacae</i> subsp. <i>Cloacae</i> NCTC 9394	P(y)	D6DT37	YP_007845256.1	406	BLUF+ EAL	827
238	<i>Enterobacter cloacae</i> subsp. <i>dissolvens</i> SDM	P(y)	I6SD99	YP_006477315.1	406	BLUF+EAL	828
239	<i>Enterobacter hormaechei</i> ATCC 49162	P(y)	F5RSE2	WP_006809041.1	406	BLUF+EAL	829
240	<i>Enterobacter mori</i>	P(y)		WP_010430222.1	406	BLUF+EAL	830
241	<i>Enterobacter radicincitans</i> DSM 16656	P(y)	J1QQB0	WP_007375061.1	413	BLUF+EAL	831
242	<i>Enterobacter sakazakii</i> ATCC BAA-894	P(y)	A7MRH4	YP_001440495.1	406	BLUF+ EAL	832
			A7MJM6	YP_001437322.1	403	BLUF+ EAL	833
243	<i>Enterobacter</i> sp. Ag1	P(y)	J0W5B8	WP_008456677.1	396	BLUF+EAL	834
	<i>Enterobacter</i> sp. MGH 14	P(y)		WP_022650917.1	406	BLUF+EAL	835
				WP_023335406.1	406	BLUF+EAL	836
				WP_023327186.1	406	BLUF+EAL	837
	<i>Enterobacter</i> sp. R4-368	P(y)	R9VFU3	YP_008106092.1	407	BLUF+EAL	838
	<i>Enterobacter</i> sp. SST3	P(y)	K4YIM7	WP_008500633.1	406	BLUF+EAL	839
244	<i>Enterobacteriaceae bacterium</i> LSJC7	P(y)		WP_017372627.1	408	BLUF+EAL	840
245	<i>Enterovibrio calviensis</i>	P(y)		WP_017010526.1	136	Short-BLUF	841
246	<i>Enterovibrio norvegicus</i>	P(y)		WP_017003299.1	138	Short-BLUF	842
				WP_016960395.1	138	Short-BLUF	843
				WP_017004081.1	138	Short-BLUF	844

				WP_016961429.1	136	Short-BLUF	845
247	<i>Erwinia billingiae</i> (strain Eb661)	P(γ)	D8MSM3	YP_003741677.1	405	BLUF+EAL	846
248	<i>Erwinia tasmaniensis</i> Et1/99	P(γ)	B2VD82	YP_001906720.1	399	BLUF+ EAL	847
249	<i>Escherichia coli</i>	P(γ)	E2QKT5	YP_002556088.1/NP_753514.1	429	BLUF+EAL	848
	<i>Escherichia coli</i>	P(γ)		WP_001391600.1	240	BLUF+EAL	849
	<i>Escherichia coli</i>	P(γ)		WP_001468594.1	403	BLUF+EAL	850
	<i>Escherichia coli</i>	P(γ)		WP_001361917.1	403	BLUF+EAL	851
	<i>Escherichia coli</i>	P(γ)		WP_004015500.1	403	BLUF+EAL	852
	<i>Escherichia coli</i>	P(γ)		WP_001743620.1	403	BLUF+EAL	853
	<i>Escherichia coli</i>	P(γ)		WP_001740380.1	373	BLUF+EAL	854
	<i>Escherichia coli</i>	P(γ)		WP_001718133.1	403	BLUF+EAL	855
	<i>Escherichia coli</i>	P(γ)		WP_001698260.1	403	BLUF+EAL	856
	<i>Escherichia coli</i>	P(γ)		WP_001691539.1	403	BLUF+EAL	857
	<i>Escherichia coli</i>	P(γ)		WP_001695881.1	403	BLUF+EAL	858
	<i>Escherichia coli</i>	P(γ)		WP_001687453.1	403	BLUF+EAL	859
	<i>Escherichia coli</i>	P(γ)		WP_001465306.1	373	BLUF+EAL	860
	<i>Escherichia coli</i>	P(γ)		WP_001355660.1	403	BLUF+EAL	861
	<i>Escherichia coli</i>	P(γ)		WP_001295665.1	403	BLUF+EAL	862
	<i>Escherichia coli</i>	P(γ)		WP_000958311.1	417	BLUF+EAL	863
	<i>Escherichia coli</i>	P(γ)		WP_000958300.1	421	BLUF+EAL	864
	<i>Escherichia coli</i>	P(γ)		WP_000958297.1	395	BLUF+EAL	865
	<i>Escherichia coli</i>	P(γ)		WP_000958288.1	107	Short-BLUF	866
	<i>Escherichia coli</i>	P(γ)		WP_001620330.1	403	BLUF+EAL	867
	<i>Escherichia coli</i>	P(γ)		WP_001612829.1	403	BLUF+EAL	868
	<i>Escherichia coli</i>	P(γ)		WP_001607239.1	403	BLUF+EAL	869
	<i>Escherichia coli</i>	P(γ)		WP_001602271.1	403	BLUF+EAL	870
	<i>Escherichia coli</i>	P(γ)		WP_001599720.1	403	BLUF+EAL	871
	<i>Escherichia coli</i>	P(γ)		WP_001595014.1	403	BLUF+EAL	872
	<i>Escherichia coli</i>	P(γ)		WP_001578179.1	403	BLUF+EAL	873
	<i>Escherichia coli</i>	P(γ)		WP_001569733.1	169	Short-BLUF	874
	<i>Escherichia coli</i>	P(γ)		WP_001568725.1	403	BLUF+EAL	875
	<i>Escherichia coli</i>	P(γ)		WP_001555889.1	403	BLUF+EAL	876
	<i>Escherichia coli</i>	P(γ)		WP_001554913.1	403	BLUF+EAL	877
	<i>Escherichia coli</i>	P(γ)		WP_001552806.1	403	BLUF+EAL	878
	<i>Escherichia coli</i>	P(γ)		WP_001544512.1	403	BLUF+EAL	879
	<i>Escherichia coli</i>	P(γ)		WP_001538632.1	403	BLUF+EAL	880
	<i>Escherichia coli</i>	P(γ)		WP_001536901.1	403	BLUF+EAL	881
	<i>Escherichia coli</i>	P(γ)		WP_001522901.1	403	BLUF+EAL	882
	<i>Escherichia coli</i>	P(γ)		WP_001524539.1	403	BLUF+EAL	883
	<i>Escherichia coli</i>	P(γ)		WP_001446235.1	403	BLUF+EAL	884
	<i>Escherichia coli</i>	P(γ)		WP_001445544.1	403	BLUF+EAL	885
	<i>Escherichia coli</i>	P(γ)		WP_000958292.1	154	Short-BLUF	886
	<i>Escherichia coli</i>	P(γ)		WP_001374958.1	403	BLUF+EAL	887
	<i>Escherichia coli</i>	P(γ)		WP_001370660.1	403	BLUF+EAL	888
	<i>Escherichia coli</i>	P(γ)		WP_000243125.1	429	BLUF+EAL	889
	<i>Escherichia coli</i>	P(γ)		WP_001437392.1	403	BLUF+EAL	890
	<i>Escherichia coli</i>	P(γ)		WP_001433282.1	403	BLUF+EAL	891
	<i>Escherichia coli</i>	P(γ)		WP_001429147.1	403	BLUF+EAL	892
	<i>Escherichia coli</i>	P(γ)		WP_001419806.1	403	BLUF+EAL	893
	<i>Escherichia coli</i>	P(γ)		WP_001386209.1	403	BLUF+EAL	894
	<i>Escherichia coli</i>	P(γ)		WP_001362180.1	403	BLUF+EAL	895
	<i>Escherichia coli</i>	P(γ)		WP_001366263.1	403	BLUF+EAL	896
	<i>Escherichia coli</i>	P(γ)		WP_001358810.1	403	BLUF+EAL	897

	<i>Escherichia coli</i>	P(y)		WP_001357463.1	403	BLUF+EAL	898
	<i>Escherichia coli</i>	P(y)		WP_001317774.1	403	BLUF+EAL	899
	<i>Escherichia coli</i>	P(y)		WP_001312754.1	403	BLUF+EAL	900
	<i>Escherichia coli</i>	P(y)		WP_001348052.1	403	BLUF+EAL	901
	<i>Escherichia coli</i>	P(y)		WP_001328999.1	403	BLUF+EAL	902
	<i>Escherichia coli</i>	P(y)		WP_001324491.1	403	BLUF+EAL	903
	<i>Escherichia coli</i>	P(y)		WP_001328624.1	403	BLUF+EAL	904
	<i>Escherichia coli</i>	P(y)		WP_001308583.1	403	BLUF+EAL	905
	<i>Escherichia coli</i>	P(y)		WP_001307726.1	403	BLUF+EAL	906
	<i>Escherichia coli</i>	P(y)		WP_001463330.1	403	BLUF+EAL	907
	<i>Escherichia coli</i>	P(y)		WP_023158058.1	405	BLUF+EAL	908
	<i>Escherichia coli</i>	P(y)		WP_023146755.1	403	BLUF+EAL	909
	<i>Escherichia coli</i>	P(y)		WP_022645540.1	403	BLUF+EAL	910
	<i>Escherichia coli</i>	P(y)		WP_023356384.1	403	BLUF+EAL	911
	<i>Escherichia coli</i>	P(y)		WP_023307905.1	403	BLUF+EAL	912
	<i>Escherichia coli</i>	P(y)		WP_023146272.1	250	BLUF	913
	<i>Escherichia coli</i>	P(y)		WP_023154785.1	408	BLUF+EAL	914
	<i>Escherichia coli</i>	P(y)		WP_021559105.1	403	BLUF+EAL	915
	<i>Escherichia coli</i>	P(y)		WP_021577349.1	403	BLUF+EAL	916
	<i>Escherichia coli</i>	P(y)		WP_021576129.1	403	BLUF+EAL	917
	<i>Escherichia coli</i>	P(y)		WP_021573430.1	403	BLUF+EAL	918
	<i>Escherichia coli</i>	P(y)		WP_021565763.1	403	BLUF+EAL	919
	<i>Escherichia coli</i>	P(y)		WP_021565021.1	403	BLUF+EAL	920
	<i>Escherichia coli</i>	P(y)		WP_021556714.1	403	BLUF+EAL	921
	<i>Escherichia coli</i>	P(y)		WP_021555271.1	403	BLUF+EAL	922
	<i>Escherichia coli</i>	P(y)		WP_021545114.1	425	BLUF+EAL	923
	<i>Escherichia coli</i>	P(y)		WP_021535563.1	342	BLUF+EAL	924
	<i>Escherichia coli</i>	P(y)		WP_021529521.1	403	BLUF+EAL	925
	<i>Escherichia coli</i>	P(y)		WP_021527398.1	400	BLUF+EAL	926
	<i>Escherichia coli</i>	P(y)		WP_021524037.1	403	BLUF+EAL	927
	<i>Escherichia coli</i>	P(y)		WP_020232864.1	403	BLUF+EAL	928
	<i>Escherichia coli</i>	P(y)		WP_020232494.1	412	BLUF+EAL	929
	<i>Escherichia coli</i>	P(y)		WP_020231333.1	403	BLUF+EAL	930
	<i>Escherichia coli</i>	P(y)		WP_016236982.1	210	Short-BLUF	931
	<i>Escherichia coli</i>	P(y)		WP_016238372.1	403	BLUF+EAL	932
	<i>Escherichia coli</i>	P(y)		WP_001661214.1	403	BLUF+EAL	933
	<i>Escherichia coli</i>	P(y)		WP_001658104.1	403	BLUF+EAL	934
	<i>Escherichia coli</i>	P(y)		WP_001654201.1	403	BLUF+EAL	935
	<i>Escherichia coli</i>	P(y)		WP_001637794.1	403	BLUF+EAL	936
	<i>Escherichia coli</i>	P(y)		WP_001596413.1	403	BLUF+EAL	937
	<i>Escherichia coli</i>	P(y)		WP_001500094.1	286	Short-BLUF	938
	<i>Escherichia coli</i>	P(y)		WP_001498311.1	138	Short-BLUF	939
	<i>Escherichia coli</i>	P(y)		WP_001413030.1	403	BLUF+EAL	940
	<i>Escherichia coli</i>	P(y)		WP_000958306.1	403	BLUF+EAL	941
	<i>Escherichia coli</i> (protein YCGF)	P(y)	Q2LD83	NP_415681.1	403	BLUF+ EAL	942
	<i>Escherichia coli</i> (strain 'clone D i14')	P(y)	G7RPK6	YP_006153556.1/NP_753514.1	429	BLUF+EAL	943
	<i>Escherichia coli</i> (strain 'clone D i2')	P(y)	G7R214	YP_006148637.1/NP_753514.1	429	BLUF+EAL	944
	<i>Escherichia coli</i> (strain ATCC 55124 / KO11)	P(y)	E8YDG2	YP_005278355.1/NP_415681.1	403	BLUF+EAL	945
	<i>Escherichia coli</i> (strain ATCC 9637)	P(y)	E0IV99	YP_006123985.1/NP_415681.1	403	BLUF+EAL	946
	<i>Escherichia coli</i> (strain K12)	P(y)	P75990	NP_415681.1	403	BLUF+EAL	947

<i>Escherichia coli</i> (strain UM146)	P(γ)	E1RSI8	YP_006111136.1/NP_415681.1	403	BLUF+EAL	948
<i>Escherichia coli</i> (strain UTI89 / UPEC)	P(γ)	Q1RCT6	YP_540359.1	429	BLUF+ EAL	949
<i>Escherichia coli</i> 042	P(γ)		YP_006095522.1	429	BLUF+EAL	950
<i>Escherichia coli</i> 178850	P(γ)	N4NL03	WP_001373149.1	258	Short-BLUF	951
<i>Escherichia coli</i> 179100	P(γ)	N3IGZ9	WP_001504199.1	371	BLUF+EAL	952
<i>Escherichia coli</i> 1827-70	P(γ)	E2WUJ4	WP_000958293.1	203	Short-BLUF	953
<i>Escherichia coli</i> 2362-75	P(γ)	E3XMI4	WP_001339576.1	372	BLUF+EAL	954
<i>Escherichia coli</i> 2534-86	P(γ)	G1Z313	YP_008564297.1/NP_415681.1	403	BLUF+EAL	955
<i>Escherichia coli</i> 2722950	P(γ)	N2FEM7	WP_001737956.1	403	BLUF+EAL	956
<i>Escherichia coli</i> 2747800	P(γ)	M9CTP4	EMW77468.1/WP_001620704.1	373	BLUF+EAL	957
<i>Escherichia coli</i> 2756500	P(γ)	M9CF46	WP_001729927.1	403	BLUF+EAL	958
<i>Escherichia coli</i> 2848050	P(γ)	M8ZHS3	WP_001716462.1	403	BLUF+EAL	959
<i>Escherichia coli</i> 3003	P(γ)	I2YWE3	EII85154.1/YP_002328824.1	403	BLUF+EAL	960
<i>Escherichia coli</i> 3030-1	P(γ)	G1ZHP6	EGW89164.1/NP_415681.1	403	BLUF+EAL	961
<i>Escherichia coli</i> 3431	P(γ)	E6B8L1	NP_415681.1	403	BLUF+EAL	962
<i>Escherichia coli</i> 536	P(γ)		YP_669112.1	403	BLUF+EAL	963
<i>Escherichia coli</i> 55989	P(γ)		YP_002402341.1	403	BLUF+EAL	964
<i>Escherichia coli</i> 55989	P(γ)	B7LGR8	NP_415681.1	403	BLUF+ EAL	965
<i>Escherichia coli</i> 83972	P(γ)	C2DS59	NP_415681.1	403	BLUF+ EAL	966
<i>Escherichia coli</i> AA86	P(γ)	F5MCT4	NP_415681.1	403	BLUF+EAL	967
<i>Escherichia coli</i> AI27	P(γ)	I1BDH2	EIE56793.1/WP_000243121.1	429	BLUF+EAL	968
<i>Escherichia coli</i> ARS4.2123	P(γ)	K3IWY5	EKI29918.1/YP_002328824.1	403	BLUF+EAL	969
<i>Escherichia coli</i> ATCC 33849 / DSM 4235	P(γ)	C9QYF1	NP_415681.1	403	BLUF+ EAL	970
<i>Escherichia coli</i> ATCC 8739 / DSM 1576	P(γ)	B1IUC7	NP_415681.1	403	BLUF+ EAL	971
<i>Escherichia coli</i> B / BL21	P(γ)	C5W442	NP_415681.1	403	BLUF+ EAL	972
<i>Escherichia coli</i> B str. REL606	P(γ)	C6UG31	NP_415681.1	403	BLUF+ EAL	973
<i>Escherichia coli</i> B088	P(γ)	D6HVN5	NP_415681.1	403	BLUF+ EAL	974
<i>Escherichia coli</i> B093	P(γ)	H1DQ46	EHO01026.1/WP_001330601.1	403	BLUF+EAL	975
<i>Escherichia coli</i> B171	P(γ)	B3WRP4	NP_415681.1	403	BLUF+ EAL	976
<i>Escherichia coli</i> B185	P(γ)	D6I668	NP_415681.1	403	BLUF+ EAL	977
<i>Escherichia coli</i> B354	P(γ)	D6J9C2	NP_415681.1	403	BLUF+ EAL	978
<i>Escherichia coli</i> B7A	P(γ)	B3HJB2	NP_415681.1	403	BLUF+ EAL	979
<i>Escherichia coli</i> BL21(DE3)	P(γ)	C6EGV1	NP_415681.1	403	BLUF+ EAL	980
<i>Escherichia coli</i> BW2952	P(γ)	C4ZS80	NP_415681.1	403	BLUF+ EAL	981
<i>Escherichia coli</i> cloneA_i1	P(γ)	G5KLP3	NP_415681.1	403	BLUF+EAL	982
<i>Escherichia coli</i> DEC10A	P(γ)	H5DHS1	NP_415681.1	403	BLUF+EAL	983
<i>Escherichia coli</i> DEC10B	P(γ)	H5E006	NP_415681.1	403	BLUF+EAL	984
<i>Escherichia coli</i> DEC10C	P(γ)	H5EGS7	NP_415681.1	403	BLUF+EAL	985
<i>Escherichia coli</i> DEC10D	P(γ)	H5EXJ1	WP_001422010.1	261	Short-BLUF	986
<i>Escherichia coli</i> DEC10E	P(γ)	H5FCY8	NP_415681.1	403	BLUF+EAL	987
<i>Escherichia coli</i> DEC11A	P(γ)	H5GAH5	NP_415681.1	403	BLUF+EAL	988
<i>Escherichia coli</i> DEC11B	P(γ)	H5GRQ2	NP_415681.1	403	BLUF+EAL	989
<i>Escherichia coli</i> DEC11C	P(γ)	H5H5Q9	NP_415681.1	403	BLUF+EAL	990
<i>Escherichia coli</i> DEC11D	P(γ)	H5HNB4	NP_415681.1	403	BLUF+EAL	991
<i>Escherichia coli</i> DEC11E	P(γ)	H5I2D6	NP_415681.1	403	BLUF+EAL	992
<i>Escherichia coli</i> DEC12A	P(γ)	H5IHF5	NP_415681.1	403	BLUF+EAL	993
<i>Escherichia coli</i> DEC12B	P(γ)	H5IZB9	NP_415681.1	403	Short-BLUF	994
<i>Escherichia coli</i> DEC12C	P(γ)	H5JGE4	NP_415681.1	403	BLUF+EAL	995
<i>Escherichia coli</i> DEC12D	P(γ)	H5JXD2	NP_415681.1	403	BLUF+EAL	996
<i>Escherichia coli</i> DEC12E	P(γ)	H5KCA3	NP_415681.1	403	BLUF+EAL	997
<i>Escherichia coli</i> DEC13A	P(γ)	H5KRY6	NP_415681.1	403	BLUF+EAL	998
<i>Escherichia coli</i> DEC13B	P(γ)	H5L5W5	NP_415681.1	403	BLUF+EAL	999
<i>Escherichia coli</i> DEC13C	P(γ)	H5LK42	NP_415681.1	403	BLUF+EAL	1000

	<i>Escherichia coli</i> DEC13D	P(y)	H5LZX0	NP_415681.1	403	BLUF+EAL	1001
	<i>Escherichia coli</i> DEC13E	P(y)	H5MDZ1	WP_001339576.1	381	BLUF+EAL	1002
	<i>Escherichia coli</i> DEC14A	P(y)	H5MTG4	NP_415681.1	403	BLUF+EAL	1003
	<i>Escherichia coli</i> DEC14B	P(y)	H5N8E5	NP_415681.1	403	BLUF+EAL	1004
	<i>Escherichia coli</i> DEC14C	P(y)	H5NN30	WP_001379733.1	372	BLUF+EAL	1005
	<i>Escherichia coli</i> DEC14D	P(y)	H5P346	NP_415681.1	403	BLUF+EAL	1006
	<i>Escherichia coli</i> DEC15A	P(y)	H5PIC2	NP_415681.1	403	BLUF+EAL	1007
	<i>Escherichia coli</i> DEC15B	P(y)	H5PXP2	NP_415681.1	403	BLUF+EAL	1008
	<i>Escherichia coli</i> DEC15C	P(y)	H5QCW6	WP_001339576.1	372	BLUF+EAL	1009
	<i>Escherichia coli</i> DEC15D	P(y)	H5QSM1	NP_415681.1	403	BLUF+EAL	1010
	<i>Escherichia coli</i> DEC15E	P(y)	H5R7T0	NP_415681.1	403	BLUF+EAL	1011
	<i>Escherichia coli</i> DEC1A	P(y)	H4HV06	WP_001339576.1	372	BLUF+EAL	1012
	<i>Escherichia coli</i> DEC1B	P(y)	H4I9V2	NP_415681.1	403	BLUF+EAL	1013
	<i>Escherichia coli</i> DEC1C	P(y)	H4IQ81	NP_415681.1	403	BLUF+EAL	1014
	<i>Escherichia coli</i> DEC1D	P(y)	H4J754	NP_415681.1	403	BLUF+EAL	1015
	<i>Escherichia coli</i> DEC1E	P(y)	H4JKR0	WP_001339576.1	372	BLUF+EAL	1016
	<i>Escherichia coli</i> DEC2A	P(y)	H4K1Y1	WP_001410290.1	261	Short-BLUF	1017
	<i>Escherichia coli</i> DEC2B	P(y)	H3KN36	NP_415681.1	403	BLUF+EAL	1018
	<i>Escherichia coli</i> DEC2C	P(y)	H4KF73	WP_001410290.1	261	Short-BLUF	1019
	<i>Escherichia coli</i> DEC2D	P(y)	H4KZ77	NP_415681.1	403	BLUF+EAL	1020
	<i>Escherichia coli</i> DEC2E	P(y)	H4LAN7	NP_415681.1	403	BLUF+EAL	1021
	<i>Escherichia coli</i> DEC3F	P(y)	H4P354	EHU91294.1/YP_006158540.1	403	BLUF+EAL	1022
	<i>Escherichia coli</i> DEC5A	P(y)	H4S987	WP_001417812.1	44	Short-BLUF	1023
	<i>Escherichia coli</i> DEC5B	P(y)	H4SPW0	WP_001418500.1	75	Short-BLUF	1024
	<i>Escherichia coli</i> DEC5C	P(y)	H4T6P3	EHV41042.1/YP_006158540.1	403	BLUF+EAL	1025
	<i>Escherichia coli</i> DEC5D	P(y)	H4TM31	WP_001419416.1	372	BLUF+EAL	1026
	<i>Escherichia coli</i> DEC5E	P(y)	H4U0V1	NP_415681.1	403	BLUF+EAL	1027
	<i>Escherichia coli</i> DEC6A	P(y)	H4UHN0	NP_415681.1	403	BLUF+EAL	1028
	<i>Escherichia coli</i> DEC6B	P(y)	H4UYZ3	NP_415681.1	403	BLUF+EAL	1029
	<i>Escherichia coli</i> DEC6C	P(y)	H4VEK7	WP_001422010.1	261	Short-BLUF	1030
	<i>Escherichia coli</i> DEC6D	P(y)	H4VUU4	NP_415681.1	403	BLUF+EAL	1031
	<i>Escherichia coli</i> DEC6E	P(y)	H4W991	NP_415681.1	403	BLUF+EAL	1032
	<i>Escherichia coli</i> DEC7A	P(y)	H4WPY9	WP_001423841.1	386	BLUF+EAL	1033
	<i>Escherichia coli</i> DEC7B	P(y)	H4X4A0	NP_415681.1	403	BLUF+EAL	1034
	<i>Escherichia coli</i> DEC7C	P(y)	H4XJ12	NP_415681.1	403	BLUF+EAL	1035
	<i>Escherichia coli</i> DEC7D	P(y)	H4XZW2	NP_415681.1	403	BLUF+EAL	1036
	<i>Escherichia coli</i> DEC7E	P(y)	H4YEQ8	WP_001425462.1	372	BLUF+EAL	1037
	<i>Escherichia coli</i> DEC8A	P(y)	H4YUP5	WP_001425462.1	372	BLUF+EAL	1038
	<i>Escherichia coli</i> DEC8B	P(y)	H4ZC69	WP_001425462.1	372	BLUF+EAL	1039
	<i>Escherichia coli</i> DEC8C	P(y)	H4ZUJ6	NP_415681.1	403	BLUF+EAL	1040
	<i>Escherichia coli</i> DEC8D	P(y)	H5ABU3	NP_415681.1	403	BLUF+EAL	1041
	<i>Escherichia coli</i> DEC8E	P(y)	H5ASV4	NP_415681.1	403	BLUF+EAL	1042
	<i>Escherichia coli</i> DEC9A	P(y)	H5B8B5	NP_415681.1	403	BLUF+EAL	1043
	<i>Escherichia coli</i> DEC9B	P(y)	H5BP36	NP_415681.1	403	BLUF+EAL	1044
	<i>Escherichia coli</i> DEC9C	P(y)	H5C4S5	WP_001425462.1	372	BLUF+EAL	1045
	<i>Escherichia coli</i> DEC9D	P(y)	H5CJX7	NP_415681.1	403	BLUF+EAL	1046
	<i>Escherichia coli</i> DEC9E	P(y)	H5D173	NP_415681.1	403	BLUF+EAL	1047
	<i>Escherichia coli</i> DH10B	P(y)	B1XA50	NP_415681.1	403	BLUF+ EAL	1048
	<i>Escherichia coli</i> E101	P(y)	H1E3B0	NP_415681.1	403	BLUF+EAL	1049
	<i>Escherichia coli</i> E110019	P(y)	B3ISH0	WP_001299924.1	403	BLUF+ EAL	1050
	<i>Escherichia coli</i> E1167	P(y)	E9W5A9	NP_415681.1	403	BLUF+EAL	1051
	<i>Escherichia coli</i> E128010	P(y)	E7HSJ0	WP_000958298.1	417	BLUF+EAL	1052
			E7HNP6	NP_415681.1	403	BLUF+EAL	1053

<i>Escherichia coli</i> E1520	P(γ)	E9WDJ1	WP_000958294.1	197	Short-BLUF	1054
<i>Escherichia coli</i> E22	P(γ)	B3ICE9	NP_415681.1	403	BLUF+ EAL	1055
<i>Escherichia coli</i> E24377A	P(γ)	A7ZKT0	NP_415681.1	403	BLUF+ EAL	1056
<i>Escherichia coli</i> E482	P(γ)	E9WRS0	NP_415681.1	403	BLUF+EAL	1057
<i>Escherichia coli</i> EC4100B	P(γ)	E7UMM1	NP_415681.1	403	BLUF+EAL	1058
<i>Escherichia coli</i> ED1a	P(γ)	B7MTT9	NP_415681.1	403	BLUF+ EAL	1059
<i>Escherichia coli</i> EPECa14	P(γ)	E7HK90	NP_415681.1	403	BLUF+EAL	1060
<i>Escherichia coli</i> F11	P(γ)	B3HNR5	NP_415681.1	403	BLUF+ EAL	1061
<i>Escherichia coli</i> FVEC1302	P(γ)	D7JMN5	NP_415681.1	403	BLUF+ EAL	1062
<i>Escherichia coli</i> FVEC1412	P(γ)	D6IP27	NP_415681.1	403	BLUF+ EAL	1063
<i>Escherichia coli</i> G58-1	P(γ)	G2B830	WP_001379733.1	372	BLUF+EAL	1064
<i>Escherichia coli</i> H252	P(γ)	E9VF91	NP_415681.1	403	BLUF+EAL	1065
<i>Escherichia coli</i> H263	P(γ)	E9VWR7	NP_415681.1	403	BLUF+EAL	1066
<i>Escherichia coli</i> H299	P(γ)	F4VTS9	NP_415681.1	403	BLUF+EAL	1067
<i>Escherichia coli</i> H397	P(γ)	H1EL63	NP_415681.1	403	BLUF+EAL	1068
<i>Escherichia coli</i> H489	P(γ)	E9XX0	YP_002998973.1	403	BLUF+EAL	1069
<i>Escherichia coli</i> H494	P(γ)	H1F5D1	NP_415681.1	403	BLUF+EAL	1070
<i>Escherichia coli</i> H591	P(γ)	F4VDH0	NP_415681.1	403	BLUF+EAL	1071
<i>Escherichia coli</i> H736	P(γ)	F4SGE2	NP_415681.1	403	BLUF+EAL	1072
<i>Escherichia coli</i> HVH 24 (4-5985145)	P(γ)	T5U3L7	EQN85704.1/YP_002328824.1	403	BLUF+EAL	1073
<i>Escherichia coli</i> HVH 87 (4-5977630)	P(γ)	T6LQJ1	WP_021526772.1	403	BLUF+EAL	1074
<i>Escherichia coli</i> IA11	P(γ)	B7LX75	NP_415681.1	403	BLUF+ EAL	1075
<i>Escherichia coli</i> IA139	P(γ)	B7NJ11	YP_001744038.1	403	BLUF+ EAL	1076
<i>Escherichia coli</i> J53	P(γ)	I0ZQT4	EIE36605.1/YP_002292481.1	429	BLUF+EAL	1077
<i>Escherichia coli</i> JJ1886	P(γ)		YP_008721327.1	403	BLUF+EAL	1078
<i>Escherichia coli</i> KTE104	P(γ)	L3B881	ELI09680.1/WP_001535319.1	403	BLUF+EAL	1079
<i>Escherichia coli</i> KTE143	P(γ)	L3VHA7	ELF21054.1/WP_001330601.1	403	BLUF+EAL	1080
<i>Escherichia coli</i> KTE147	P(γ)	L4J3Y8	WP_001469311.1	403	BLUF+EAL	1081
<i>Escherichia coli</i> KTE189	P(γ)	L4U2B8	WP_001535319.1	403	BLUF+EAL	1082
<i>Escherichia coli</i> KTE24	P(γ)	S0WSF1	WP_016234228.1	203	Short-BLUF	1083
<i>Escherichia coli</i> KTE36	P(γ)	S0Y267	WP_001330601.1/EOU92452.1	403	BLUF+EAL	1084
<i>Escherichia coli</i> KTE37	P(γ)	S0Y3B4	WP_001330601.1/EOU92469.1	403	BLUF+EAL	1085
<i>Escherichia coli</i> KTE38	P(γ)	S0Z706	WP_001330601.1/EOV06473.1	403	BLUF+EAL	1086
<i>Escherichia coli</i> KTE69	P(γ)	S1E0R2	WP_001330601.1/EOV65043.1	403	BLUF+EAL	1087
<i>Escherichia coli</i> KTE70	P(γ)	S1EQY3	WP_001330601.1/EOV73843.1	403	BLUF+EAL	1088
<i>Escherichia coli</i> KTE74	P(γ)	S1GJK9	WP_001330601.1/EOV95898.1	403	BLUF+EAL	1089
<i>Escherichia coli</i> KTE75	P(γ)	L3QAD1	WP_001563125.1	403	BLUF+EAL	1090
<i>Escherichia coli</i> KTE98	P(γ)	S1GV17	EOV99135.1/WP_001330601.1	403	BLUF+EAL	1091
<i>Escherichia coli</i> M605	P(γ)	F4SXD2	NP_415681.1	403	BLUF+EAL	1092
<i>Escherichia coli</i> M718	P(γ)	F4TD47	NP_415681.1	403	BLUF+EAL	1093
<i>Escherichia coli</i> M863	P(γ)	E9YT62	NP_415681.1	403	BLUF+EAL	1094
<i>Escherichia coli</i> MS 107-1	P(γ)	D8ELF2	NP_415681.1	403	BLUF+EAL	1095
<i>Escherichia coli</i> MS 110-3	P(γ)	E5ZQR8	NP_415681.1	403	BLUF+EAL	1096
<i>Escherichia coli</i> MS 115-1	P(γ)	D7Y2E5	NP_415681.1	403	BLUF+EAL	1097
<i>Escherichia coli</i> MS 116-1	P(γ)	D8AP06	NP_415681.1	403	BLUF+EAL	1098
<i>Escherichia coli</i> MS 117-3	P(γ)	E9TJ35	NP_415681.1	403	BLUF+EAL	1099
<i>Escherichia coli</i> MS 119-7	P(γ)	D8E362	NP_415681.1	403	BLUF+EAL	1100
<i>Escherichia coli</i> MS 124-1	P(γ)	E1JCK6	NP_415681.1	403	BLUF+EAL	1101
<i>Escherichia coli</i> MS 145-7	P(γ)	E1IU70	NP_415681.1	403	BLUF+EAL	1102
<i>Escherichia coli</i> MS 146-1	P(γ)	E1HU81	WP_000958299.1	184	Short-BLUF	1103
<i>Escherichia coli</i> MS 153-1	P(γ)	E6AF94	NP_415681.1	403	BLUF+EAL	1104
<i>Escherichia coli</i> MS 16-3	P(γ)	E6AUN3	NP_415681.1	403	BLUF+EAL	1105
<i>Escherichia coli</i> MS 175-1	P(γ)	D8B0N6	NP_415681.1	403	BLUF+EAL	1106

<i>Escherichia coli</i> MS 182-1	P(y)	D7YEE0	NP_415681.1	403	BLUF+EAL	1107
<i>Escherichia coli</i> MS 185-1	P(y)	D8C9B8	NP_415681.1	403	BLUF+EAL	1108
<i>Escherichia coli</i> MS 187-1	P(y)	D7ZPK1	NP_415681.1	403	BLUF+EAL	1109
<i>Escherichia coli</i> MS 196-1	P(y)	D8C5N7	NP_415681.1	403	BLUF+EAL	1110
<i>Escherichia coli</i> MS 198-1	P(y)	D7X3D5	NP_415681.1	403	BLUF+EAL	1111
<i>Escherichia coli</i> MS 200-1	P(y)	D8BP86	NP_415681.1	403	BLUF+EAL	1112
<i>Escherichia coli</i> MS 21-1	P(y)	D8AF51	WP_001330601.1	403	BLUF+EAL	1113
<i>Escherichia coli</i> MS 45-1	P(y)	D7YSY1	NP_415681.1	403	BLUF+EAL	1114
<i>Escherichia coli</i> MS 57-2	P(y)	E9UH50	NP_415681.1	403	BLUF+EAL	1115
<i>Escherichia coli</i> MS 60-1	P(y)	E9TPH6	NP_415681.1	403	BLUF+EAL	1116
<i>Escherichia coli</i> MS 69-1	P(y)	D7ZI44	NP_415681.1	403	BLUF+EAL	1117
<i>Escherichia coli</i> MS 78-1	P(y)	E1I486	WP_001333133.1	381	BLUF+EAL	1118
<i>Escherichia coli</i> MS 79-10	P(y)	F8XHY8	NP_415681.1	403	BLUF+EAL	1119
<i>Escherichia coli</i> MS 84-1	P(y)	D7XUY0	NP_415681.1	403	BLUF+EAL	1120
<i>Escherichia coli</i> MS 85-1	P(y)	E6BLL3	NP_415681.1	403	BLUF+EAL	1121
<i>Escherichia coli</i> NC101	P(y)	E0QZI5	NP_415681.1	403	BLUF+EAL	1122
<i>Escherichia coli</i> O1:K1 / APEC	P(y)	A1AA89	NP_415681.1	403	BLUF+ EAL	1123
<i>Escherichia coli</i> O103:H2 (strain 12009 / EHEC)	P(y)	C8U6S6	NP_415681.1	403	BLUF+ EAL	1124
<i>Escherichia coli</i> O104:H4 str. 01-09591	P(y)	F9CGF7	NP_415681.1	403	BLUF+EAL	1125
<i>Escherichia coli</i> O104:H4 str. 04-8351	P(y)	G5U6U7	NP_415681.1	403	BLUF+EAL	1126
<i>Escherichia coli</i> O104:H4 str. 09-7901	P(y)	G5TW99	NP_415681.1	403	BLUF+EAL	1127
<i>Escherichia coli</i> O104:H4 str. 11-3677	P(y)	G5UQE0	NP_415681.1	403	BLUF+EAL	1128
<i>Escherichia coli</i> O104:H4 str. 11-4404	P(y)	G5VMA5	NP_415681.1	403	BLUF+EAL	1129
<i>Escherichia coli</i> O104:H4 str. 11-4522	P(y)	G5W1R3	NP_415681.1	403	BLUF+EAL	1130
<i>Escherichia coli</i> O104:H4 str. 11-4623	P(y)	G5W4F4	NP_415681.1	403	BLUF+EAL	1131
<i>Escherichia coli</i> O104:H4 str. 11-4632 C1	P(y)	G5WRS9	NP_415681.1	403	BLUF+EAL	1132
<i>Escherichia coli</i> O104:H4 str. 11-4632 C2	P(y)	G5X6D7	NP_415681.1	403	BLUF+EAL	1133
<i>Escherichia coli</i> O104:H4 str. 11-4632 C3	P(y)	G5XQC8	NP_415681.1	403	BLUF+EAL	1134
<i>Escherichia coli</i> O104:H4 str. 11-4632 C4	P(y)	G5XVF0	NP_415681.1	403	BLUF+EAL	1135
<i>Escherichia coli</i> O104:H4 str. 11-4632 C5	P(y)	G5YFA6	NP_415681.1	403	BLUF+EAL	1136
<i>Escherichia coli</i> O104:H4 str. C227-11	P(y)	F9HVJ8	NP_415681.1	403	BLUF+EAL	1137
<i>Escherichia coli</i> O104:H4 str. C236-11	P(y)	G5TEW1	NP_415681.1	403	BLUF+EAL	1138
<i>Escherichia coli</i> O104:H4 str. LB226692	P(y)	F8YEL3	WP_001386733.1	372	BLUF+EAL	1139
<i>Escherichia coli</i> O111:H- (strain 11128 / EHEC)	P(y)	C8UNSO	YP_003233971.1	403	BLUF+ EAL	1140
<i>Escherichia coli</i> O127:H6 (strain E2348/69 / EPEC)	P(y)	B7UQ48	CAS08828.1/YP_002328824.1	403	BLUF+ EAL	1141
<i>Escherichia coli</i> O150:H5 (strain SE15)	P(y)	D2NHMO	NP_753514.1	429	BLUF+ EAL	1142
<i>Escherichia coli</i> O157:H- str. 493-89	P(y)	E8HST2	EFX12369.1/YP_006158540.1	403	BLUF+EAL	1143
<i>Escherichia coli</i> O157:H- str. H 2687	P(y)	E8I6Q4	EFX16781.1/YP_006158540.1	403	BLUF+EAL	1144
<i>Escherichia coli</i> O157:H43 str. T22	P(y)	H4FLQ5	NP_415681.1	403	BLUF+EAL	1145
<i>Escherichia coli</i> O157:H7 str. G5101	P(y)	E8HDS1	NP_415681.1	403	BLUF+EAL	1146
<i>Escherichia coli</i> O157:H7 str. LSU-61	P(y)	E8JDA4	EFX31706.1/YP_006158540.1	403	BLUF+EAL	1147
<i>Escherichia coli</i> O17:K52:H18 (strain UMN026 / ExPEC)	P(y)	B7N3W4	NP_415681.1	403	BLUF+ EAL	1148
<i>Escherichia coli</i> O18:K1:H7 (strain IHE3034 / ExPEC)	P(y)	D5D0X4	NP_415681.1	403	BLUF+ EAL	1149
<i>Escherichia coli</i> O25b:H4-ST131 str. EC958	P(y)	N1N5N1	WP_001295983.1	146	Short-BLUF	1150
<i>Escherichia coli</i> O26:H11 (strain 11368 / EHEC)	P(y)	C8TQH3	NP_415681.1	403	BLUF+ EAL	1151
<i>Escherichia coli</i> O44:H18 (strain 042 / EAEC)	P(y)	D3H1V7	NP_753514.1	429	BLUF+ EAL	1152
<i>Escherichia coli</i> O55:H7 str. 3256-97	P(y)	E8IK46	WP_000958309.1	106	Short-BLUF	1153
<i>Escherichia coli</i> O55:H7 str. RM12579	P(y)	H6MEI0	AEZ39985.1/YP_006158540.1	403	BLUF+EAL	1154
<i>Escherichia coli</i> O55:H7 str. USDA 5905	P(y)	E8IY83	EFX26987.1/YP_006158540.1	403	BLUF+EAL	1155
<i>Escherichia coli</i> O6	P(y)	Q8FI42	NP_753514.1	429	BLUF+ EAL	1156
<i>Escherichia coli</i> O6:K15:H31 536 / UPEC)	P(y)	Q0TIL8	NP_415681.1	403	BLUF+ EAL	1157
<i>Escherichia coli</i> O83:H1 (strain NRG 857C / AIEC)	P(y)	E4P2E2	ADR26615.1/YP_006119549.1	403	BLUF+EAL	1158
<i>Escherichia coli</i> O9:H4 / HS	P(y)	A7ZZ94	NP_415681.1	403	BLUF+ EAL	1159

	<i>Escherichia coli</i> OK1180	P(y)	E7IPF0	NP_415681.1	403	BLUF+EAL	1160
	<i>Escherichia coli</i> OK1357	P(y)	E7J2J6	NP_415681.1	403	BLUF+EAL	1161
	<i>Escherichia coli</i> OR:K5:H- (strain ABU 83972)	P(y)	E1PJK6	NP_753514.1	429	BLUF+EAL	1162
	<i>Escherichia coli</i> P0301867.11	P(y)	N3F7P9	WP_001484419.1	403	BLUF+EAL	1163
	<i>Escherichia coli</i> P0304816.15	P(y)	N4BKD7	ENF50218.1/WP_001620704.1	373	BLUF+EAL	1164
	<i>Escherichia coli</i> P0305260.5	P(y)	N4GMJ1	WP_001648704.1	403	BLUF+EAL	1165
	<i>Escherichia coli</i> PCN033	P(y)	F7MVM7	NP_415681.1	403	BLUF+EAL	1166
	<i>Escherichia coli</i> RN587/1	P(y)	E7JQF9	EFZ72697.1/YP_002328824.1	403	BLUF+EAL	1167
	<i>Escherichia coli</i> S88	P(y)	B7MK58	NP_415681.1	403	BLUF+ EAL	1168
	<i>Escherichia coli</i> SCI-07	P(y)	H8D7Y9	NP_415681.1	403	BLUF+EAL	1169
	<i>Escherichia coli</i> SE11	P(y)	B6I9L9	BAG76730.1/YP_002292481.1	429	BLUF+ EAL	1170
	<i>Escherichia coli</i> SE15	P(y)		YP_003349094.1	429	BLUF+EAL	1171
	<i>Escherichia coli</i> SMS-3-5 / SECEC	P(y)	B1LI04	YP_001744038.1	403	BLUF+ EAL	1172
	<i>Escherichia coli</i> STEC_7v	P(y)	F3LXX7	WP_001360582.1	372	BLUF+EAL	1173
	<i>Escherichia coli</i> STEC_94C	P(y)	G1ZY43	WP_001378868.1	261	Short-BLUF	1174
	<i>Escherichia coli</i> STEC_B2F1	P(y)	G1Y830	WP_000958302.1	371	BLUF+EAL	1175
	<i>Escherichia coli</i> STEC_C165-02	P(y)	G1YNH8	WP_001376825.1	372	BLUF+EAL	1176
	<i>Escherichia coli</i> STEC_DG131-3	P(y)	G2AEF4	WP_001379733.1	372	BLUF+EAL	1177
	<i>Escherichia coli</i> STEC_EH250	P(y)	G2ATD7	WP_001379733.1	372	BLUF+EAL	1178
	<i>Escherichia coli</i> STEC_H.1.8	P(y)	G2BMD5	WP_001382007.1	230	Short-BLUF	1179
	<i>Escherichia coli</i> STEC_MHI813	P(y)	G2C2Z3	WP_001383099.1	372	BLUF+EAL	1180
	<i>Escherichia coli</i> STEC_S1191	P(y)	G2CJ51	NP_415681.1	403	BLUF+EAL	1181
	<i>Escherichia coli</i> TA124	P(y)	H1FGR3	WP_001389598.1	403	BLUF+EAL	1182
	<i>Escherichia coli</i> TA143	P(y)	F4U625	NP_415681.1	403	BLUF+EAL	1183
	<i>Escherichia coli</i> TA206	P(y)	F4TT04	WP_000958310.1	176	Short-BLUF	1184
	<i>Escherichia coli</i> TA271	P(y)	F4ULK8	NP_415681.1	403	BLUF+EAL	1185
	<i>Escherichia coli</i> TW10509	P(y)	E9XMH9	WP_000958307.1	403	BLUF+EAL	1186
	<i>Escherichia coli</i> TX1999	P(y)	G2CYS1	NP_415681.1	403	BLUF+EAL	1187
	<i>Escherichia coli</i> UMN026	P(y)		YP_002412195.1	403	BLUF+EAL	1188
	<i>Escherichia coli</i> UMN18	P(y)	G0FBW4	NP_415681.1	403	BLUF+EAL	1189
	<i>Escherichia coli</i> UMNK88	P(y)	F4M2X4	NP_415681.1	403	BLUF+EAL	1190
	<i>Escherichia coli</i> WV_060327	P(y)	E7U6E5	NP_415681.1	403	BLUF+EAL	1191
	<i>Escherichia coli</i> XH001	P(y)	G2F1Z8	NP_415681.1	403	BLUF+EAL	1192
	<i>Escherichia coli</i> XH140A	P(y)	F9QYE5	NP_415681.1		BLUF+EAL	1193
250	<i>Escherichia hermannii</i> NBRC 105704	P(y)	H5V3N0	WP_002436603.1		BLUF+EAL	1194
			H5UZV4	WP_002434328.1	406	BLUF+EAL	1195
251	<i>Escherichia</i> sp. 3_2_53FAA	P(y)	C1HJN0	NP_753514.1	429	BLUF+ EAL	1196
252	<i>Frateuria aurantia</i> ATCC 33424	P(y)	H8L2L8	YP_005377167.1	424	BLUF+EAL	1197
			H8L2L7	YP_005377166.1	439	BLUF+EAL	1198
253	<i>gamma proteobacterium</i> BDW918	P(y)	I2JPC2	WP_008246638.1	138	Short-BLUF	1199
254	<i>gamma proteobacterium</i> HIMB55	P(y)U	H3NRI2	WP_009470377.1	146	Short-BLUF	1200
255	<i>gamma proteobacterium</i> IMCC1989	P(y)	F3LF24	WP_009669485.1	144	Short-BLUF	1201
256	<i>gamma proteobacterium</i> IMCC2047	P(y)U	F3KDB1	WP_008530288.1	150	Short-BLUF	1202
257	<i>gamma proteobacterium</i> IMCC2047	P(y)Unc		EGG99643.1	150	Short-BLUF	1203
258	<i>gamma proteobacterium</i> IMCC3088	P(y)U	F3KYX3	WP_009574606.1	145	Short-BLUF	1204
259	<i>gamma proteobacterium</i> NOR5-3	P(y)U	B8KEY4	WP_009021778.1	161	Short-BLUF	1205
260	<i>gamma proteobacterium</i> NOR5-3	P(y)U	B8KL1	WP_009023838.1	157	Short-BLUF	1206
261	<i>gamma proteobacterium</i> NOR5-3	P(y)U	B8KT47	WP_009021276.1	149	Short-BLUF	1207
262	<i>gamma proteobacterium</i> WG36	P(y)		WP_017494424.1	405	BLUF+EAL	1208
263	<i>Gayadomonas joobiniege</i>	P(y)		WP_017445646.1	152	Short-BLUF	1209
264	<i>Gilvimirinus chinensis</i>	P(y)		WP_020208650.1	152	Short-BLUF	1210
265	<i>Glaciecola arctica</i> BSs20135	P(y)	K6Y178	WP_007616696.1	136	Short-BLUF	1211
			K6Y8U9	WP_007622166.1	134	Short-BLUF	1212

266	<i>Glaciecola mesophila</i> KMM 241	P(γ)	K6XXC1	WP_006993405.1	133	Short-BLUF	1213
267	<i>Glaciecola nitratireducens</i> JCM 12485	P(γ)	G4QF34	YP_004870371.1	147	Short-BLUF	1214
268	<i>Grimontia hollisae</i> CIP 101886	P(γ)	D0IB49	WP_005505863.1	136	Short-BLUF	1215
269	<i>Grimontia</i> sp. AK16	P(γ)	R1IQH4	WP_002541795.1	136	Short-BLUF	1216
270	<i>Halothiobacillus neapolitanus</i> c2	P(γ)	D0L046	YP_003263116.1	143	Short-BLUF	1217
271	<i>Kangiella aquimarina</i>	P(γ)		WP_018624129.1	143	Short-BLUF	1218
272	<i>Kangiella koreensis</i> DSM 16069	P(γ)	C7R790	YP_003147314.1	143	Short-BLUF	1219
273	<i>Klebsiella oxytoca</i>	P(γ)		WP_016810135.1	407	BLUF+EAL	1220
	<i>Klebsiella oxytoca</i>	P(γ)		WP_023320606.1	407	BLUF+EAL	1221
	<i>Klebsiella oxytoca</i>	P(γ)		WP_017145797.1	409	BLUF+EAL	1222
	<i>Klebsiella oxytoca</i>	P(γ)		WP_016808785.1	409	BLUF+EAL	1223
	<i>Klebsiella oxytoca</i> 10-5242	P(γ)	H3L520	EHT02598.1/WP_004849017.1	407	BLUF+EAL	1224
	<i>Klebsiella oxytoca</i> 10-5242	P(γ)	H3L8A3	EHS99926.1/WP_004851219.1	408	BLUF+EAL	1225
	<i>Klebsiella oxytoca</i> 10-5243	P(γ)	H3LKF5	WP_004100387.1	407	BLUF+EAL	1226
	<i>Klebsiella oxytoca</i> 10-5243	P(γ)	H3LPD4	WP_004102968.1	390	BLUF+EAL	1227
	<i>Klebsiella oxytoca</i> 10-5243	P(γ)	H3LNU7	EHS97649.1/WP_004102385.1	409	BLUF+EAL	1228
	<i>Klebsiella oxytoca</i> 10-5245	P(γ)	H3M2I6	WP_004111512.1	407	BLUF+EAL	1229
	<i>Klebsiella oxytoca</i> 10-5245	P(γ)	H3M586	EHS97119.1/WP_004113307.1	409	BLUF+EAL	1230
	<i>Klebsiella oxytoca</i> 10-5250	P(γ)	H3N9V3	WP_004130625.1	407	BLUF+EAL	1231
	<i>Klebsiella oxytoca</i> 10-5250	P(γ)	H3MWL6	EHT14305.1/WP_004119787.1	408	BLUF+EAL	1232
	<i>Klebsiella oxytoca</i> ATCC 8724	P(γ)	G8WFT1	YP_005018934.1	407	BLUF+EAL	1233
	<i>Klebsiella oxytoca</i> ATCC 8724	P(γ)	G8WGX1	AEX05998.1/YP_005020237.1	402	BLUF+EAL	1234
	<i>Klebsiella oxytoca</i> E718	P(γ)	I6W311	YP_006497531.1	407	BLUF+EAL	1235
	<i>Klebsiella oxytoca</i> M5al	P(γ)	K6JLZ8	WP_004134964.1	407	BLUF+EAL	1236
	<i>Klebsiella oxytoca</i> M5al	P(γ)	K6JK93	WP_004136285.1	405	BLUF+EAL	1237
274	<i>Klebsiella pneumoniae</i>	P(γ)	R4YC97	CC178036.1	403	BLUF+EAL	1238
	<i>Klebsiella pneumoniae</i>	P(γ)	G0GUP8	YP_005953822.1	403	BLUF+EAL	1239
	<i>Klebsiella pneumoniae</i>	P(γ)	G0GPP1	YP_005954630.1	405	BLUF+EAL	1240
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_017899618.1	403	BLUF+EAL	1241
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_021314053.1	403	BLUF+EAL	1242
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_020802923.1	405	BLUF+EAL	1243
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_017879970.1	405	BLUF+EAL	1244
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_021314208.1	405	BLUF+EAL	1245
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_017900341.1	405	BLUF+EAL	1246
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023288895.1	403	BLUF+EAL	1247
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023287389.1	403	BLUF+EAL	1248
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023302151.1	403	BLUF+EAL	1249
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023283451.1	410	BLUF+EAL	1250
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023297241.1	403	BLUF+EAL	1251
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023342830.1	405	BLUF+EAL	1252
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023341511.1	405	BLUF+EAL	1253
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023327961.1	405	BLUF+EAL	1254
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023322569.1	405	BLUF+EAL	1255
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023316827.1	405	BLUF+EAL	1256
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023301958.1	405	BLUF+EAL	1257
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023286396.1	405	BLUF+EAL	1258
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023318182.1	405	BLUF+EAL	1259
	<i>Klebsiella pneumoniae</i>	P(γ)		WP_023340100.1	405	BLUF+EAL	1260
	<i>Klebsiella pneumoniae</i> 342	P(γ)	B5XQZ5	YP_002238639.1	405	BLUF+ EAL	1261
	<i>Klebsiella pneumoniae</i> 342	P(γ)	B5XZ96	ACI08361.1/YP_002239613.1	403	BLUF+ EAL	1262
	<i>Klebsiella pneumoniae</i> 700603	P(γ)	M7PV04	WP_004886055.1	403	BLUF+EAL	1263
	<i>Klebsiella pneumoniae</i> 700603	P(γ)	M7PCJ7	WP_004206010.1	405	BLUF+EAL	1264
	<i>Klebsiella pneumoniae</i> ATCC BAA-1705	P(γ)	M7QLZ6	EMR23689.1/YP_005226813.1	405	BLUF+EAL	1265

	<i>Klebsiella pneumoniae</i> ATCC BAA-2146	P(γ)	M7QLK1	EMR23559.1/YP_005226813.1	405	BLUF+EAL	1266
	<i>Klebsiella pneumoniae</i> CG43	P(γ)		YP_008659363.1	403	BLUF+EAL	1267
	<i>Klebsiella pneumoniae</i> DMC0799	P(γ)	S7BC21	EPO21704.1/YP_001334448.1	403	BLUF+EAL	1268
	<i>Klebsiella pneumoniae</i> hvKP1	P(γ)	M2AJV2	EMB10239.1/YP_001334448.1	403	BLUF+EAL	1269
	<i>Klebsiella pneumoniae</i> hvKP1	P(γ)	M2ATT4	EMB12948.1/YP_001335259.1	405	BLUF+EAL	1270
	<i>Klebsiella pneumoniae</i> JHCK1	P(γ)	M3V4M6	YP_001334448.1	403	BLUF+EAL	1271
	<i>Klebsiella pneumoniae</i> JHCK1	P(γ)	M3SU26	EMH92743.1/YP_001335259.1	405	BLUF+EAL	1272
	<i>Klebsiella pneumoniae</i> KP-11	P(γ)	S2CCS2	EOZ72815.1/YP_001334448.1	403	BLUF+EAL	1273
	<i>Klebsiella pneumoniae</i> KP-7	P(γ)	S1TBD0	EOY66353.1/YP_001334448.1	403	BLUF+EAL	1274
	<i>Klebsiella pneumoniae</i> NTUH-K2044	P(γ)	C4X832	YP_002919357.1	422	BLUF+ EAL	1275
	<i>Klebsiella pneumoniae</i> NTUH-K2044	P(γ)	C4X5Q9	YP_002918534.1	403	BLUF+ EAL	1276
	<i>Klebsiella pneumoniae</i> RYC492	P(γ)	M5QAQ1	WP_004893335.1	403	BLUF+EAL	1277
	<i>Klebsiella pneumoniae</i> RYC492	P(γ)	M5Q7X9	EMH98112.1/YP_006636433.1	405	BLUF+EAL	1278
275	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> 1084	P(γ)	K4HAP6	YP_006637253.1/YP_001334448.1	403	BLUF+EAL	1279
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> 1084	P(γ)	K4H3X6	YP_006636433.1	405	BLUF+EAL	1280
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> ATCC 700721	P(γ)	A6T8V8	ABR77029.1/YP_001335259.1	405	BLUF+ EAL	1281
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> ATCC 700721	P(γ)	A6T6J7	ABR76218.1/YP_001334448.1	403	BLUF+ EAL	1282
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> DSM 30104	P(γ)	J2X7Q0	EJK91023.1/YP_001335259.1	405	BLUF+EAL	1283
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> Ecl8	P(γ)	K4UDV3	CCN29648.1/YP_001335259.1	405	BLUF+EAL	1284
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> HS11286	P(γ)	G8W5H8	YP_005225909.1	403	BLUF+EAL	1285
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> HS11286	P(γ)	G8W1U2	AEW61211.1/YP_005226813.1	405	BLUF+EAL	1286
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KpMDU1	P(γ)	N9UNX0	WP_002895176.1	103	Short-BLUF	1287
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KpMDU1	P(γ)	N9UB22	ENY57642.1/YP_005226813.1	405	BLUF+EAL	1288
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH1	P(γ)	J2LLB7	EJJ33749.1/YP_005226813.1	405	BLUF+EAL	1289
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH10	P(γ)	J2Q500	EJJ73872.1/YP_005226813.1	405	BLUF+EAL	1290
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH11	P(γ)	J1Y1B0	EJJ83951.1/YP_005226813.1	405	BLUF+EAL	1291
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH12	P(γ)	J2R422	EJJ85679.1/YP_005226813.1	405	BLUF+EAL	1292
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH14	P(γ)	J1XPZ0	EJJ86178.1/YP_005226813.1	405	BLUF+EAL	1293
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH16	P(γ)	J2SEY9	EJK01005.1/YP_005226813.1	405	BLUF+EAL	1294
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH17	P(γ)	J1ZJT8	EJK00872.1/YP_005226813.1	405	BLUF+EAL	1295
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH18	P(γ)	J1ZTT7	EJK09919.1/YP_005226813.1	405	BLUF+EAL	1296
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH19	P(γ)	J2TV30	EJK17135.1/YP_005226813.1	405	BLUF+EAL	1297
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH2	P(γ)	J2BEA0	EJJ34470.1/YP_005226813.1	405	BLUF+EAL	1298
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH20	P(γ)	J2TVY5	EJK17435.1/YP_005226813.1	405	BLUF+EAL	1299
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH21	P(γ)	J2JB02	EJK27376.1/YP_005226813.1	405	BLUF+EAL	1300
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH22	P(γ)	J2VAC5	EJK33703.1/YP_005226813.1	405	BLUF+EAL	1301
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH23	P(γ)	J2BVP2	EJK34244.1/YP_005226813.1	405	BLUF+EAL	1302
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH4	P(γ)	J2CGH8	EJJ47550.1/YP_005226813.1	405	BLUF+EAL	1303
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH5	P(γ)	J1V7T6	EJJ51671.1/YP_005226813.1	405	BLUF+EAL	1304
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH6	P(γ)	J1VSE1	EJJ58196.1/YP_005226813.1	405	BLUF+EAL	1305
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH7	P(γ)	J1VSD5	EJJ63833.1/YP_005226813.1	405	BLUF+EAL	1306
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH8	P(γ)	J1WBB9	EJJ70043.1/YP_005226813.1	405	BLUF+EAL	1307
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KPNIH9	P(γ)	J1WDS7	EJJ70888.1/YP_005226813.1	405	BLUF+EAL	1308
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> KpQ3	P(γ)	M5GMC5	EKF78982.1/YP_001335259.1	405	BLUF+EAL	1309
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> ST258-K26BO	P(γ)	K4RS57	CCM80630.1/YP_005226813.1	405	BLUF+EAL	1310
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> ST258-K28BO	P(γ)	K4SA97	CCM86960.1/YP_005226813.1	405	BLUF+EAL	1311
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> ST512-K30BO	P(γ)	K4SX07	CCM95184.1/YP_005226813.1	405	BLUF+EAL	1312
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> WGLW1	P(γ)	K1NF33	EKB66739.1/YP_001334448.1	403	BLUF+EAL	1313
			K1M9Z4	EKB66010.1/YP_001335259.1	405	BLUF+EAL	1314
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> WGLW2	P(γ)	K1NR75	EKB79227.1/YP_001334448.1	403	BLUF+EAL	1315
			K1N312	EKB75950.1/YP_001335259.1	405	BLUF+EAL	1316
	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> WGLW3	P(γ)	K1N1S9	YP_001334448.1/EKB75485.1	403	BLUF+EAL	1317
			K1NLB8	EKB77327.1/YP_001335259.1	405	BLUF+EAL	1318

	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> WGLW5	P(y)	K1Q3I3	EKB86354.1/YP_001334448.1	403	BLUF+EAL	1319
			K1Q1K2	WP_004184418.1	390	BLUF+EAL	1320
			K1P7W3	EKB85222.1/YP_001335259.1	405	BLUF+EAL	1321
276	<i>Klebsiella pneumoniae</i> subsp. <i>rhinoscleromatis</i> ATCC 13884	P(y)	C8TA32	EEW39489.1/YP_001335259.1	405	BLUF+ EAL	1322
	<i>Klebsiella pneumoniae</i> subsp. <i>rhinoscleromatis</i> ATCC 13884	P(y)	C8T1B3	WP_004142148.1	405	BLUF+ EAL	1323
	<i>Klebsiella pneumoniae</i> UHKPC179	P(y)	S7FYI3	YP_001334448.1	403	BLUF+EAL	1324
	<i>Klebsiella pneumoniae</i> UHKPC23	P(y)	R9BEZ7	EOR15588.1/YP_005226813.1	405	BLUF+EAL	1325
	<i>Klebsiella pneumoniae</i> UHKPC57	P(y)	S2EQN8	EPA91839.1/YP_001334448.1	403	BLUF+EAL	1326
	<i>Klebsiella pneumoniae</i> UHKPC81	P(y)	S1UVJ0	EOY85408.1/YP_001334448.1	403	BLUF+EAL	1327
	<i>Klebsiella pneumoniae</i> VA360	P(y)	M5SGV5	EMI36105.1/YP_005226813.1	405	BLUF+EAL	1328
277	<i>Klebsiella</i> sp. 1_1_55	P(y)	D6GDL7	EFD87032.1/WP_008804990.1	405	BLUF+ EAL	1329
			D6GGM4	WP_008805714.1	403	BLUF+ EAL	1330
	<i>Klebsiella</i> sp. 4_1_44FAA	P(y)	G9RCF4	EHL93455.1/YP_001334448.1	403	BLUF+EAL	1331
	<i>Klebsiella</i> sp. KTE92	P(y)	R8XC78	EOQ54795.1/YP_002239613.1	403	BLUF+EAL	1332
	<i>Klebsiella</i> sp. KTE92	P(y)	R8XFY6	WP_016160979.1	405	BLUF+EAL	1333
	<i>Klebsiella</i> sp. MS 92-3	P(y)	F3Q8C8	EGF62238.1/YP_001335259.1	405	BLUF+EAL	1334
			F3PZ97	EGF65408.1/YP_001334448.1	403	BLUF+EAL	1335
	<i>Klebsiella</i> sp. OBRC7	P(y)	J5V6R0	WP_004849017.1	407	BLUF+EAL	1336
278	<i>Klebsiella variicola</i> (strain At-22)	P(y)	D3RGS1	YP_003439664.1	405	BLUF+ EAL	1337
			D3RM34	YP_003440514.1	403	BLUF+ EAL	1338
	<i>Klebsiella variicola</i> CAG:634	P(y)	R5WD52	CDA00595.1/YP_002239613.1	403	BLUF+EAL	1339
			R5WE11	WP_008804990.1	405	BLUF+EAL	1340
			R5X5Z9	WP_022066376.1	390	BLUF+EAL	1341
279	<i>Lamprocystis purpurea</i>	P(y)		WP_020505137.1	295	BLUF+PsiE	1342
280	<i>Legionella drancourtii</i> LLAP12	P(y)	G9ETS2	WP_006872576.1	155	Short-BLUF	1343
281	<i>Legionella longbeachae</i> D-4968	P(y)	D1RLZ8	WP_003636764.1	309	BLUF+PAS	1344
282	<i>Legionella longbeachae</i> serogroup 1 (strain NSW150)	P(y)	D3HJ09	YP_003455474.1	708	BLUF+3PAS+GGDEF	1345
283	<i>Leucothrix mucor</i>	P(y)		WP_022951283.1	139	Short-BLUF	1346
				WP_022951988.1	143	Short-BLUF	1347
284	<i>Marichromatium purpuratum</i> 984	P(y)	F9TWL2	WP_005220255.1	1221	2PAS+GGDEF+EAL+BLUF	1348
			F9TYC6	WP_005221896.1	137	Short-BLUF	1349
285	<i>marine gamma proteobacterium</i> HTCC2080	P(y)U	A0Z2D8	WP_007233984.1	150	Short-BLUF	1350
			A0Z4F4	WP_007234700.1	159	Short-BLUF	1351
			A0Z3A0	WP_007234296.1	152	Short-BLUF	1352
286	<i>marine gamma proteobacterium</i> HTCC2148	P(y)U	B7S2E6	WP_007230530.1	127	Short-BLUF	1353
287	<i>Marinobacter adherens</i> (strain HP15)	P(y)	E4PFT3	YP_005885931.1	143	Short-BLUF	1354
			E4PIQ9		185	Short-BLUF	1355
288	<i>Marinobacter algicola</i> DG893	P(y)	A6F2F1	WP_007154440.1	188	Short-BLUF	1356
289	<i>Marinobacter aquaeolei</i> VT8	P(y)	A1U4G7	YP_960073.1	189	Short-BLUF	1357
290	<i>Marinobacter hydrocarbonoclasticus</i> ATCC 49840	P(y)	H8WBH9	YP_005430586.1	189	Short-BLUF	1358
291	<i>Marinobacter lipolyticus</i> SM19	P(y)	R8B0A9	WP_012138058.1	151	Short-BLUF	1359
292	<i>Marinobacter manganoxydans</i> Mnl7-9	P(y)	G6YW66	WP_008175045.1	143	Short-BLUF	1360
			G6YUG7	WP_008174059.1	188	Short-BLUF	1361
293	<i>Marinomonas mediterranea</i> ATCC 700492	P(y)	F2JZB3	YP_004315034.1	138	Short-BLUF	1362
			F2JWR3	YP_004313663.1	144	Short-BLUF	1363
294	<i>Marinomonas posidonica</i> CECT 7376	P(y)	F6CVF9	YP_004482255.1	143	Short-BLUF	1364
295	<i>Marinomonas</i> sp. MED121	P(y)	A3YED7	WP_009835955.1	140	Short-BLUF	1365
			A3YFN4	WP_009833224.1	152	Short-BLUF	1366
			A3YFL0	WP_009833248.1	154	Short-BLUF	1367
	<i>Marinomonas</i> sp. MWYL1	P(y)	A6VYY7	YP_001341601.1	142	Short-BLUF	1368
296	<i>Methylobacter marinus</i>	P(y)		WP_020161578.1	289	BLUF+PsiE	1369
297	<i>Methylobacter tundripaludum</i> SV96	P(y)	G3ISM9	WP_006890370.1	289	Short-BLUF	1370
298	<i>Methylohalobius crimeensis</i>	P(y)		WP_022950030.1	290	BLUF+PsiE	1371

299	<i>Methylobacterium alcaliphilum</i> DSM 19304	P(y)	G4T071	YP_004916955.1	136	Short-BLUF	1372
			G4T077	YP_004916961.1	294	Short-BLUF	1373
			G4T0S3	YP_004915950.1	141	Short-BLUF	1374
			G4T2T3	YP_004916161.1	1111	PAS+GGDEF+EAL+BLUF	1375
300	<i>Methylobacterium buryatense</i>	P(y)		WP_017838976.1	294	BLUF+PsiE	1376
				WP_017840127.1	1097	LeuBD+PAS+GGDEF+EAL+BLUF	1377
				WP_017840877.1	141	Short-BLUF	1378
				WP_017840373.1	141	Short-BLUF	1379
				WP_017838971.1	136	Short-BLUF	1380
301	<i>Methylobacterium japonense</i>	P(y)	Q25BV7	BAE86881.1	141	Short-BLUF	1381
302	<i>Methylomonas methanica</i> (strain MC09)	P(y)	G0A610	YP_004512959.1	120	Short-BLUF	1382
			G0A1P9	YP_004512609.1	292	Short-BLUF	1383
			G0A2A9	YP_004511421.1	1104	PAS+GGDEF+EAL+BLUF	1384
303	<i>Methylophaga aminisulfidivorans</i> MP	P(y)	F5T211	WP_007146401.1	140	Short-BLUF	1385
304	<i>Methylophaga lonarensis</i> MPL	P(y)	M7PJN9	WP_009725326.1	159	Short-BLUF	1386
305	<i>Methylophaga thiooxidans</i> DMS010	P(y)	C0N5Z8	WP_008291053.1	139	Short-BLUF	1387
			C0N9F9	WP_008292188.1	136	Short-BLUF	1388
306	<i>Neptuniibacter caesariensis</i>	P(y)	Q2BIC6	WP_007020013.1	142	Short-BLUF	1389
			Q2BP57	WP_007020760.1	147	Short-BLUF	1390
307	<i>Nevskia ramosa</i>	P(y)		WP_022977191.1	429	BLUF+SCHICH	1391
308	<i>Pantoea agglomerans</i>	P(y)		WP_022625735.1	403	BLUF+EAL	1392
				WP_010671955.1	395	BLUF+EAL	1393
				WP_010670046.1	403	BLUF+EAL	1394
				WP_022624234.1	395	BLUF+EAL	1395
	<i>Pantoea agglomerans</i> 299R	P(y)	L7BXC6	ELP25506.1/WP_003850648.1	395	BLUF+EAL	1396
			L7BW56	ELP25775.1/WP_003850263.1	403	BLUF+EAL	1397
309	<i>Pantoea ananatis</i>	P(y)		WP_019105298.1	415	BLUF+EAL	1398
	<i>Pantoea ananatis</i> (strain AJ13355)	P(y)	F2ET35	YP_005195892.1	403	BLUF+EAL	1399
			F2EZT9	YP_003522512.1	397	BLUF+EAL	1400
	<i>Pantoea ananatis</i> (strain LMG 20103)	P(y)	D4GGD1	CP001875.2/YP_003522512.1	397	BLUF+ EAL	1401
			D4GDM8	YP_003520043.1	403	BLUF+ EAL	1402
	<i>Pantoea ananatis</i> LMG 5342	P(y)	G9AT61	CCF09855.1/YP_005195892.1	403	BLUF+EAL	1403
			G9AXC0	YP_005197808.1	397	BLUF+EAL	1404
	<i>Pantoea ananatis</i> PA13	P(y)	G7UHX4	YP_005993091.1/YP_005195892.1	403	BLUF+EAL	1405
			G7UM94	YP_005990549.1	397	BLUF+EAL	1406
310	<i>Pantoea dispersa</i> EGD-AAK13	P(y)	U1TTN2	WP_021509874.1	403	BLUF+EAL	1407
311	<i>Pantoea</i> sp. aB	P(y)	E0M383	WP_008926784.1	405	BLUF+EAL	1408
			E0M391	ELP25506.1/WP_003850648.1	395	BLUF+EAL	1409
			E0M088	EFM19210.1/WP_003850263.1	403	BLUF+EAL	1410
	<i>Pantoea</i> sp. AS-PWVM4	P(y)	U2M401	WP_021182872.1	403	BLUF+EAL	1411
	<i>Pantoea</i> sp. At-9b	P(y)	E6WL97	YP_004118738.1	386	BLUF+EAL	1412
			E6WBK2	YP_004116243.1	403	BLUF+EAL	1413
	<i>Pantoea</i> sp. GM01	P(y)	J2LHM1	WP_007891430.1	403	BLUF+EAL	1414
	<i>Pantoea</i> sp. Sc1	P(y)	H8DUK7	WP_009093254.1	395	BLUF+EAL	1415
			H8DLJ6	WP_009090445.1	403	BLUF+EAL	1416
			H8DUL4	WP_009093262.1	405	BLUF+EAL	1417
	<i>Pantoea</i> sp. SL1_M5	P(y)		WP_010256946.1	395	BLUF+EAL	1418
				WP_010245539.1	403	BLUF+EAL	1419
	<i>Pantoea</i> sp. YR343	P(y)	J2UXE8	WP_008105386.1	403	BLUF+EAL	1420
312	<i>Pantoea stewartii</i> subsp. <i>stewartii</i> DC283	P(y)	H3RKF0	WP_006122006.1	134	Short-BLUF	1421
			H3RCE8	WP_006119001.1	403	BLUF+EAL	1422
313	<i>Pantoea vagans</i> C9-1 (<i>Pantoea agglomerans</i> C9-1)	P(y)	E1SBR1	YP_003930829.1	403	BLUF+EAL	1423
			E1PKB3	YP_003929520.1	404	BLUF+EAL	1424

			E1PKA4	YP_003929511.1	409	BLUF+EAL	1425
314	<i>Pectobacterium carotovorum</i>	P(y)		WP_010274875.1	406	BLUF+EAL	1426
315	<i>Perluclidibaca piscinae</i>	P(y)		WP_022956463.1	150	Short-BLUF	1427
316	<i>Plautia stali symbiont</i>	P(y)		YP_008652566.1	149	Short-BLUF	1428
				YP_008649935.1	398	BLUF+EAL	1429
				WP_010615636.1	386	BLUF+EAL	1430
317	<i>Pseudoalteromonas atlantica</i>	P(y)		WP_011573653.1	138	Short-BLUF	1431
	<i>Pseudoalteromonas atlantica</i> (T6c / BAA-1087)	P(y)	Q15XU6	YP_660346.1	138	Short-BLUF	1432
			Q15W34	YP_660958.1	133	Short-BLUF	1433
318	<i>Pseudoalteromonas citrea</i>	P(y)		WP_010367293.1	139	Short-BLUF	1434
	<i>Pseudoalteromonas citrea</i> NCIMB 1889	P(y)	U1KR28	WP_010361781.1	145	Short-BLUF	1435
319	<i>Pseudoalteromonas luteoviolacea</i>	P(y)		WP_023398227.1	138	Short-BLUF	1436
				WP_023397937.1	143	Short-BLUF	1437
	<i>Pseudoalteromonas luteoviolacea</i> B = ATCC 29581	P(y)	L8D6G6	WP_005493992.1	144	Short-BLUF	1438
			L8DBD1	WP_005493516.1	139	Short-BLUF	1439
320	<i>Pseudoalteromonas marina</i> mano4	P(y)	U1JNR5	WP_010557655.1	141	Short-BLUF	1440
321	<i>Pseudoalteromonas rubra</i> ATCC 29570	P(y)	U1LSW8	WP_010383116.1	142	Short-BLUF	1441
322	<i>Pseudoalteromonas rutenica</i>	P(y)		WP_022946637.1	140	Short-BLUF	1442
323	<i>Pseudoalteromonas</i> sp. BS120311	P(y)	G7EN43	WP_008108394.1	141	Short-BLUF	1443
	<i>Pseudoalteromonas</i> sp. BS120439	P(y)	G7FK05	GAA73478.1	141	Short-BLUF	1444
	<i>Pseudoalteromonas</i> sp. BS120480	P(y)	G7FLG8	WP_008127010.1	141	Short-BLUF	1445
	<i>Pseudoalteromonas</i> sp. BS120652	P(y)	G7ED85	WP_008166519.1	141	Short-BLUF	1446
	<i>Pseudoalteromonas</i> sp. PAMC 22718	P(y)		WP_016900061.1	141	Short-BLUF	1447
	<i>Pseudoalteromonas</i> sp. SM9913	P(y)	E6RIH7	YP_004067295.1	138	Short-BLUF	1448
324	<i>Pseudoalteromonas spongiae</i>	P(y)		WP_010558562.1	143	Short-BLUF	1449
				WP_010562063.1	142	Short-BLUF	1450
325	<i>Pseudoalteromonas tunicata</i> D2	P(y)	A4C8E2	WP_009838119.1	140	Short-BLUF	1451
			A4CA03	WP_009840043.1	133	Short-BLUF	1452
326	<i>Pseudoalteromonas undina</i> NCIMB 2128	P(y)	U1MG36	WP_010392015.1	141	Short-BLUF	1453
327	<i>Pseudomonas alcaligenes</i> NBRC 14159	P(y)	U2ZK93	WP_021699986.1	144	Short-BLUF	1454
328	<i>Pseudomonas alcaliphila</i>	P(y)		WP_017675860.1	144	Short-BLUF	1455
329	<i>Pseudomonas pseudoalcaligenes</i> CECT 5344	P(y)	I7K7F2	WP_003463988.1	267	Short-BLUF	1456
330	<i>Psychrobacter aquaticus</i>	P(y)		WP_021813036.1	174	Short-BLUF	1457
				WP_021815321.1	156	Short-BLUF	1458
				WP_021812947.1	202	Short-BLUF	1459
				WP_021813035.1	145	Short-BLUF	1460
				WP_021814263.1	210	Short-BLUF	1461
				WP_021815442.1	168	Short-BLUF	1462
331	<i>Psychrobacter arcticum</i>	P(y)	Q4FUS2	YP_263670.1	210	Short-BLUF	1463
332	<i>Psychrobacter cryohalolentis</i> (strain K5)	P(y)	Q1QDR2	YP_579675.1	210	Short-BLUF	1464
			Q1Q9K9	YP_581128.1	196	Short-BLUF	1465
			Q1QAA1	YP_580886.1	169	Short-BLUF	1466
333	<i>Psychrobacter lutiphocae</i>	P(y)		WP_019674133.1	215	Short-BLUF	1467
				WP_019672901.1	213	Short-BLUF	1468
334	<i>Psychrobacter</i> sp. 1501(2011)	P(y)	F5SNV9	WP_007394103.1	209	Short-BLUF	1469
			F5SLW1	WP_007393405.1	216	Short-BLUF	1470
	<i>Psychrobacter</i> sp. G	P(y)	S4YVW0	YP_008163550.1	169	Short-BLUF	1471
			T1EBM8	YP_008163896.1	207	Short-BLUF	1472
			S4YSN3	YP_008162349.1	210	Short-BLUF	1473
	<i>Psychrobacter</i> sp. PAMC 21119	P(y)		WP_010201341.1	172	Short-BLUF	1474
				WP_010201340.1	145	Short-BLUF	1475
				WP_010196365.1	207	Short-BLUF	1476
				WP_010201745.1	208	Short-BLUF	1477

	<i>Psychrobacter</i> sp. PRwf-1	P(γ)	A5WCY1	YP_001279472.1	209	Short-BLUF	1478
			A5WEX6	YP_001280167.1	216	Short-BLUF	1479
335	<i>Psychromonas ingrahamii</i> (strain 37)	P(γ)	A1SZ77	YP_944391.1	157	Short-BLUF	1480
336	<i>Rahnella aquatilis</i> ATCC 33071	P(γ)	H2J1E2	YP_005220397.1	413	BLUF+EAL	1481
	<i>Rahnella aquatilis</i> HX2	P(γ)	H8P0G4	YP_005419028.1	413	BLUF+EAL	1482
337	<i>Rahnella</i> sp. (strain Y9602)	P(γ)	E8XZI5	YP_004215373.1	413	BLUF+EAL	1483
338	<i>Reinekea</i> sp. MED297		A4BGV1	WP_008047183.1	172	Short-BLUF	1484
339	<i>Rheinheimera</i> sp. A13L	P(γ)	F7NUK1	WP_008898335.1	141	Short-BLUF	1485
340	<i>Salinisphaera shabanensis</i> E1L3A	P(γ)	F7Q923	WP_006913789.1	142	Short-BLUF	1486
341	<i>Serratia</i> sp. M24T3	P(γ)	I0QUJ8	WP_009636506.1	404	BLUF+EAL	1487
342	<i>Shewanella oneidensis</i>	P(γ)	Q8EBA3	NP_719171.1	140	Short-BLUF	1488
343	<i>Shewanella woodyi</i> ATCC 51908	P(γ)	B1KH49	YP_001762456.1	156	Short-BLUF	1489
344	<i>Shigella boydii</i> 4444-74	P(γ)	I6EHF9	EIQ43451.1/WP_000958290.1	133	Short-BLUF	1490
	<i>Shigella boydii</i> 5216-82	P(γ)	F3WJP8	WP_004992970.1	372	BLUF+EAL	1491
	<i>Shigella boydii</i> 965-58	P(γ)	I6DEL8	WP_004999597.1	403	BLUF+EAL	1492
	<i>Shigella boydii</i> ATCC 9905	P(γ)	E7T1P3	WP_004976550.1	372	BLUF+EAL	1493
345	<i>Shigella dysenteriae</i> 1012	P(γ)	B3X612	WP_005013749.1	311	BLUF+ EAL	1494
	<i>Shigella dysenteriae</i> 155-74	P(γ)	F3V2I3	WP_000958286.1	342	BLUF+EAL	1495
346	<i>Shigella flexneri</i> 1485-80	P(γ)	K0XUP4	EJZ67510.1/WP_000958290.1	133	Short-BLUF	1496
	<i>Shigella flexneri</i> 2850-71	P(γ)	I6BWJ3	WP_005109173.1	261	BLUF+EAL	1497
	<i>Shigella flexneri</i> CCH060	P(γ)	I6C3N2	EIQ14124.1/WP_000958290.1	133	Short-BLUF	1498
	<i>Shigella flexneri</i> J1713	P(γ)	F7R7D0	WP_005101736.1	386	BLUF+EAL	1499
	<i>Shigella flexneri</i> VA-6	P(γ)	F5N0U1	WP_005067857.1	372	BLUF+EAL	1500
347	<i>Shigella sonnei</i> 53G	P(γ)	E7K4N8	WP_005140026.1	198	Short-BLUF	1501
348	<i>Shigella</i> sp. D9	P(γ)	F4NHE2	EGJ05355.1/WP_000243121.1	429	BLUF+EAL	1502
349	<i>Simidiua agarivorans</i> SA1 = DSM 21679	P(γ)		YP_006916092.1	176	Short-BLUF	1503
350	<i>Spongibacter tropicus</i>	P(γ)		WP_022958549.1	139	Short-BLUF	1504
351	<i>Stenotrophomonas maltophilia</i>	P(γ)		WP_019661581.1	139	Short-BLUF	1505
				WP_019659714.1	155	Short-BLUF	1506
	<i>Stenotrophomonas maltophilia</i> Ab55555	P(γ)	J7V2U9	WP_005408981.1/YP_001971521.1	144	Short-BLUF	1507
			J7VQR4	WP_005409694.1	155	Short-BLUF	1508
	<i>Stenotrophomonas maltophilia</i> AU12-09	P(γ)	M5TMH3	WP_005416006.1	144	Short-BLUF	1509
			M5TWK9	WP_005416570.1	155	Short-BLUF	1510
	<i>Stenotrophomonas maltophilia</i> D457	P(γ)	I0KM94	YP_006184358.1	144	Short-BLUF	1511
			I0KNV6	YP_006184918.1	155	Short-BLUF	1512
	<i>Stenotrophomonas maltophilia</i> EPM1	P(γ)	M3FAW7	YP_001971521.1	144	Short-BLUF	1513
	<i>Stenotrophomonas maltophilia</i> EPM1	P(β)	M3G6A4	WP_005413472.1	155	Short-BLUF	1514
	<i>Stenotrophomonas maltophilia</i> JV3	P(γ)	G0JUR4	YP_004792041.1	144	Short-BLUF	1515
			G0K4E1	YP_004794149.1	143	Short-BLUF	1516
			G0JY27	YP_004792350.1	142	Short-BLUF	1517
	<i>Stenotrophomonas maltophilia</i> K279a	P(γ)	B2FSB2	YP_001972310.1	155	Short-BLUF	1518
			B2FNU4	YP_001971901.1	144	Short-BLUF	1519
			B2FSB7	YP_001972315.1	132	Short-BLUF	1520
			B2FK66	CAQ45217.1/YP_001971521.1	144	Short-BLUF	1521
			B2FSU5	YP_001972350.1	157	Short-BLUF	1522
			B2FSA5	YP_001972303.1	149	Short-BLUF	1523
	<i>Stenotrophomonas maltophilia</i> MF89	P(γ)	T5KGS5	WP_019658901.1	144	Short-BLUF	1524
			T5L8X7	WP_021202418.1	155	Short-BLUF	1525
	<i>Stenotrophomonas maltophilia</i> RA8	P(γ)	M5D728	YP_002027818.1	144	Short-BLUF	1526
	<i>Stenotrophomonas maltophilia</i> R551-3	P(γ)	B4STM1	YP_002028128.1	142	Short-BLUF	1527
			B4SR64	ACF51135.1/YP_002027818.1	144	Short-BLUF	1528
	<i>Stenotrophomonas maltophilia</i> SKK35	P(γ)	M5CLY6	CCP10895.1	144	Short-BLUF	1529
	<i>Stenotrophomonas</i> sp. SKA14	P(γ)	B8L2D7	WP_008267235.1	144	Short-BLUF	1530

			B8LA17	WP_008268182.1	142	Short-BLUF	1531
352	<i>Teredinibacter turnerae</i>	P(γ)		WP_018415581.1	138	Short-BLUF	1532
				WP_018276843.1	138	Short-BLUF	1533
353	<i>Thioalkalimicrobium aerophilum</i> AL3	P(γ)	G4D9V3	WP_006459896.1	135	Short-BLUF	1534
354	<i>Thioalkalivibrio</i> sp. HL-EbGR7	P(γ)	B8GPZ7	YP_002515131.1	168	Short-BLUF	1535
	<i>Thioalkalivibrio</i> sp. K90mix	P(γ)	D3SBJ7	YP_003461138.1	196	Short-BLUF	1536
355	<i>Thiocystis violascens</i> (Chromatium violascens) ATCC 17096	P(γ)	I3YBW9	YP_006414612.1	597	GGDEF+EAL+BLUF	1537
356	<i>Thioflavococcus mobilis</i> 8321	P(γ)	L0H2H2	YP_007245882.1	293	BLUF+PsiE	1538
357	<i>Thiorhodococcus drewsii</i> AZ1	P(γ)	G2DZK4	WP_007040181.1	1199	2PAS+GGDEF+EAL+BLUF	1539
			G2E4Y1	WP_007042057.1	151	Short-BLUF	1540
358	<i>Thiorhodospira sibirica</i> ATCC 700588	P(γ)	G4E7K7	WP_006788315.1	139	Short-BLUF	1541
			G4E8F6	WP_006788612.1	1099	2PAS+GGDEF+EAL+BLUF	1542
359	<i>Thiorhodovibrio</i> sp. 970	P(γ)	H8Z515	WP_009150825.1	148	Short-BLUF	1543
			H8Z1A9	WP_009148009.1	299	Short-BLUF	1544
360	uncultured gamma proteobacterium	P(γ)U	H5SE04	BAL54390.1	113	Short-BLUF	1545
361	uncultured <i>Thiohalocapsa</i> sp. PB-PSB1	P(γ)		WP_023410594.1	183	Short-BLUF	1546
				WP_023414210.1	149	Short-BLUF	1547
362	<i>Vibrio</i>	P(γ)		WP_017060344.1	139	Short-BLUF	1548
363	<i>Vibrio breoganii</i>	P(γ)		WP_017029863.1	141	Short-BLUF	1549
				WP_017031909.1	141	Short-BLUF	1550
364	<i>Vibrio cholera</i> RC385	P(γ)	D7HCX4	WP_001885575.1	142	Short-BLUF	1551
	<i>Vibrio cholerae</i>	P(γ)		WP_019829651.1	142	Short-BLUF	1552
365	<i>Vibrio coralliilyticus</i> ATCC BAA-450	P(γ)	C9NR36	WP_006958871.1	139	Short-BLUF	1553
			C9NQ17	WP_006958783.1	136	Short-BLUF	1554
			C9NPY7	WP_006958749.1	104	Short-BLUF	1555
			C9NVS2	WP_006961401.1	141	Short-BLUF	1556
	<i>Vibrio coralliilyticus</i> OCN008	P(γ)	U0ET87	WP_019275344.1	141	Short-BLUF	1557
366	<i>Vibrio crassostreae</i>	P(γ)		WP_017065379.1	139	Short-BLUF	1558
				WP_017067227.1	139	Short-BLUF	1559
				WP_017070503.1	139	Short-BLUF	1560
367	<i>Vibrio cyclitrophicus</i>	P(γ)		WP_016768597.1	139	Short-BLUF	1561
				WP_010440401.1	139	Short-BLUF	1562
				WP_016796603.1	139	Short-BLUF	1563
				WP_016793122.1	139	Short-BLUF	1564
368	<i>Vibrio genomosp.</i> F10	P(γ)		WP_017038440.1	139	Short-BLUF	1565
				WP_017034560.1	139	Short-BLUF	1566
	<i>Vibrio genomosp.</i> F6	P(γ)		WP_017052207.1	139	Short-BLUF	1567
369	<i>Vibrio ichthyenteri</i> ATCC 700023	P(γ)	F9S3C4	WP_006712577.1	134	Short-BLUF	1568
370	<i>Vibrio nigripulchritudo</i>	P(γ)		WP_022604223.1	138	Short-BLUF	1569
				YP_008620961.1	138	Short-BLUF	1570
				WP_022589537.1	127	Short-BLUF	1571
				WP_022600546.1	127	Short-BLUF	1572
				YP_008641840.1	127	Short-BLUF	1573
	<i>Vibrio nigripulchritudo</i> ATCC 27043	P(γ)	F9THX2	WP_004400464.1	138	Short-BLUF	1574
	<i>Vibrio nigripulchritudo</i> ATCC 27043	P(γ)	F9TGM9	EGU61078.1/WP_004399602.1	127	Short-BLUF	1575
371	<i>Vibrio ordalii</i>	P(γ)		WP_010320661.1	145	Short-BLUF	1576
372	<i>Vibrio orientalis</i> CIP 102891 = ATCC 33934	P(γ)	C9QIB2	WP_004414323.1	60	Short-BLUF	1577
373	<i>Vibrio scopthalmi</i> LMG 19158	P(γ)	F9RIQ0	WP_005592861.1	139	Short-BLUF	1578
374	<i>Vibrio sinaloensis</i> DSM 21326	P(γ)	E8M6S4	WP_008076812.1	139	Short-BLUF	1579
375	<i>Vibrio</i> sp. MED222	P(γ)	A3Y2H2	WP_009847120.1	142	Short-BLUF	1580
376	<i>Vibrio splendidus</i>	P(γ)		WP_017079037.1	139	Short-BLUF	1581
				WP_017090104.1	139	Short-BLUF	1582
				WP_017093202.1	139	Short-BLUF	1583

				WP_017073405.1	139	Short-BLUF	1584
				WP_019824217.1	139	Short-BLUF	1585
	<i>Vibrio splendidus</i> 12B01	P(γ)	A3UYZ3	WP_004734641.1	141	Short-BLUF	1586
	<i>Vibrio splendidus</i> Me132	P(γ)	B7VGM9	YP_002417504.1	139	Short-BLUF	1587
377	<i>Vibrio tasmaniensis</i>	P(γ)		WP_017097344.1	139	Short-BLUF	1588
378	<i>Vibrio tubiashii</i> ATCC 19109	P(γ)	F9T3Q3	EGU56983.1/WP_004744136.1	151	Short-BLUF	1589
	<i>Vibrio tubiashii</i> NCIMB 1337 = ATCC 19106	P(γ)	I1DCC9	WP_004744136.1	151	Short-BLUF	1590
379	<i>Vibrio vulnificus</i>	P(γ)		WP_017420365.1	139	Short-BLUF	1591
	<i>Vibrio vulnificus</i>	P(γ)		WP_017790365.1	139	Short-BLUF	1592
380	<i>Vibrionales bacterium</i> SWAT-3	P(γ)	A5L553	WP_008222460.1	139	Short-BLUF	1593
381	<i>Xanthomonadaceae</i>	P(γ)		WP_010486035.1	144	Short-BLUF	1594
382	<i>Xanthomonas axonopodis</i>	P(γ)		WP_016850851.1	159	Short-BLUF	1595
				WP_017158845.1	158	Short-BLUF	1596
				WP_017156640.1	159	Short-BLUF	1597
383	<i>Xanthomonas axonopodis</i> pv. <i>citri</i> str.306	P(γ)	Q8PHH6	AAM38122.1/NP_643586.1	147	Short-BLUF	1598
			Q8PKP9	AAM36973./NP_642437.1	158	Short-BLUF	1599
384	<i>Xanthomonas axonopodis</i> pv. <i>punicae</i> str. LMG 859	P(γ)	H1XN33	WP_005934425.1	128	Short-BLUF	1600
	<i>Xanthomonas axonopodis</i> Xac29-1	P(γ)	M4TW81	YP_007636565.1/NP_642437.1	158	Short-BLUF	1601
			M4TZI7	NP_643586.1	147	Short-BLUF	1602
385	<i>Xanthomonas citri</i> pv. <i>mangiferae</i> indicae LMG 941	P(γ)	H8FLF5	WP_003490419.1	158	Short-BLUF	1603
386	<i>Xanthomonas citri</i> subsp. <i>citri</i> Aw12879	P(γ)	M4WEN8	NP_642437.1	158	Short-BLUF	1604
387	<i>Xanthomonas fuscans</i> subsp. <i>aurantifolia</i> str. ICPB 10535	P(γ)	D4TC91	WP_007975774.1	147	Short-BLUF	1605
			D4SRA6	WP_007962696.1	159	Short-BLUF	1606
388	<i>Xanthomonas fuscans</i> subsp. <i>fuscans</i>	P(γ)		YP_008638953.1	159	Short-BLUF	1607
389	<i>Xanthomonas perforans</i> 91-118	P(γ)	F0BUQ3	WP_008575691.1	184	Short-BLUF	1608
390	<i>Xanthomonas</i> sp. M97	P(γ)		WP_022971905.1	144	Short-BLUF	1609
391	<i>Bacteriovorax</i> sp. BAL6_X	P(δ)	T0C040	WP_021268210.1	153	Short-BLUF	1610
392	<i>Bdellovibrio bacteriovorus</i> str. <i>Tiberius</i>	P(δ)	K7YL37	YP_007021703.1	142	Short-BLUF	1611
393	<i>Desulfatibacillum alkenivorans</i> AK-011	P(δ)	B8FK53	YP_002430196.1	144	Short-BLUF	1612
394	<i>Desulfococcus oleovorans</i> Hxd3	P(δ)	A9A0H4	YP_001529551.1	148	Short-BLUF	1613
395	<i>Desulfovibrio longus</i>	P(δ)		WP_022663022.1	146	Short-BLUF	1614
396	<i>Myxococcus xanthus</i> DK1622	P(δ)	Q93SK7		253	Short-BLUF	1615
397	uncultured <i>Desulfofustis</i> sp. PB-SRB1	P(δ)Unc		WP_023408928.1	144	Short-BLUF	1616
398	<i>Magnetococcus</i> sp. MC-1	P(Magn)	A0LAZ4	YP_866543.1	1118	PAS+GGDEF+EAL+BLUF	1617
			A0L5S5	YP_864724.1	139	Short-BLUF	1618
			A0LAQ1	YP_866450.1	160	Short-BLUF	1619
399	<i>Thiovulum</i> sp. ES	P(e)	J0L733	WP_008350312.1	143	Short-BLUF	1620
			J1FAS2	WP_008350313.1	143	Short-BLUF	1621
400	<i>zeta proteobacterium</i> SCGC AB-137-C09	P(ζ)		WP_018281521.1	291	BLUF+PsiE	1622
401	candidate division TG3 bacterium ACh1	Unc		WP_022635648.1	141	Short-BLUF	1623
402	uncultured bacterium	Unc	K2GM21	EKE24165.1	122	Short-BLUF	1624
403	uncultured bacterium 581	PUnc	Q6SFE3	AAR38275.1/WP_007234700.1	159	Short-BLUF	1625
404	uncultured proteobacterium delRiverFos06H03	PUnc	Q58PP1	AAX48191.1	147	Short-BLUF	1626
405	uncultured proteobacterium.	PUnc	Q8KZ47	AAM48626.1	146	Short-BLUF	1627
406	<i>Cyanothece</i> sp. PCC 7425 / ATCC 29141	Cya	B8HWP0	YP_002484827.1	145	Short-BLUF	1628
407	<i>Halotheca</i> sp. PCC 7418 (<i>Synechococcus</i> sp. PCC 7418)	Cya	K9YCI0	YP_007168017.1	163	Short-BLUF	1629
408	<i>Oscillatoria acuminata</i> PCC 6304	Cya	K9TLZ5	YP_007087096.1	366	BLUF+GGDEF	1630
409	<i>Pseudanabaena biceps</i> PCC 7429	Cya	L8MTI5	WP_009629186.1	370	BLUF+GGDEF	1631
410	<i>Synechococcus</i> sp. (strain ATCC 27167 / PCC 6312)	Cya	K9RSY2	YP_007060755.1	141	Short-BLUF	1632
	<i>Synechococcus</i> sp. PCC 7002	Cya	B1XJZ3	YP_001734377.1	145	Short-BLUF	1633
	<i>Synechococcus</i> sp. PCC 7502	Cya	K9SXI7	YP_007106786.1	153	Short-BLUF	1634
411	<i>Synechocystis</i> sp. PCC 6803	Cya	L8AQ59	NP_441709.1	150	Short-BLUF	1635
			F7UR00	BAK50562.1/YP_005651767.1	150	Short-BLUF	1636

			P74295	YP_005651767.1/NP_441709.1	150	Short-BLUF	1637
	<i>Synechocystis</i> sp. PCC 6803 substr. GT-I	Cya	H0NXE6	YP_005383576.1	150	Short-BLUF	1638
	<i>Synechocystis</i> sp. PCC 6803 substr. PCC-N	Cya	H0P9U8	YP_005409452.1	150	Short-BLUF	1639
	<i>Synechocystis</i> sp. PCC 6803 substr. PCC-P	Cya	H0PNV0	YP_005386745.1	150	Short-BLUF	1640
412	<i>Thermosynechococcus elongatus</i>	Cya	Q8DMN3	NP_680869.1	143	Short-BLUF	1641
413	<i>Rhodopirellula baltica</i>	PI	Q7UXU1	NP_864233.1	141	Short-BLUF	1642
	<i>Rhodopirellula baltica</i> WH47	PI	F2AXT1	WP_007328441.1	132	Short-BLUF	1643
414	<i>Rhodopirellula europaea</i> SH398	PI	M5S3C7	WP_008667793.1	141	Short-BLUF	1644
415	<i>Rhodopirellula sallentina</i> SM41	PI	M5U559	WP_008676976.1	166	Short-BLUF	1645
	<i>Rhodopirellula</i> sp. SWK7	PI	M5SVB2	WP_009104720.1	154	Short-BLUF	1646
			M5TST8	WP_009093809.1	184	Short-BLUF	1647
416	<i>Candidatus Nitrospira defluvii</i>	Nit	D8PAY1	YP_003796316.1	138	Short-BLUF	1648
417	<i>Bdellovibrio bacteriovorus</i>	Bact	Q6MPS8	NP_967726.1	142	Short-BLUF	1649
418	<i>Cellulophaga algicola</i> DSM 14237	Bact	E6X5L6	YP_004163880.1	144	Short-BLUF	1650
419	<i>Cesiribacter andamanensis</i> AMV16	Bact	M7N429	WP_009196222.1	143	Short-BLUF	1651
420	<i>Chloroherpeton thalassium</i> ATCC 35110	Bact	B3QX03	YP_001997260.1	145	Short-BLUF	1652
421	<i>Cytophagales</i> str. B6	Bact		WP_022830361.1	140	Short-BLUF	1653
422	<i>Dokdonia donghaensis</i> MED134	Bact	A2TPW0	EAQ40501.1	135	Short-BLUF	1654
423	<i>Eudoraea adriatica</i>	Bact		WP_019668996.1	146	Short-BLUF	1655
424	<i>Fibrella aestuarina</i> BUZ 2	Bact	I0KAE1	YP_007321687.1	143	Short-BLUF	1656
425	<i>Fibrisoma limi</i> BUZ 3	Bact	I2GNV8	WP_009284154.1	229	Short-BLUF	1657
426	<i>Flavobacteria bacterium</i> BBFL7.	Bact	Q26D86	WP_006795753.1	139	Short-BLUF	1658
427	<i>Flavobacteriaceae bacterium</i> P7-3-5	Bact		WP_019387910.1	136	Short-BLUF	1659
428	<i>Formosa agariphila</i> KMM 3901	Bact		CDF79453.1	144	Short-BLUF	1660
429	<i>Fulvivirga imtechensis</i> AK7	Bact	L8JX15	WP_009577900.1	139	Short-BLUF	1661
430	<i>Gillisia limnaea</i> DSM 15749	Bact	H2BX58	WP_006988327.1	134	Short-BLUF	1662
			H2BW61	WP_006989286.1	133	Short-BLUF	1663
			H2BVP6	WP_006990305.1	135	Short-BLUF	1664
			H2BX59	WP_006988328.1	135	Short-BLUF	1665
431	<i>Gramella forsetii</i> KT0803	Bact	A0LYB8	YP_860431.1	133	Short-BLUF	1666
432	<i>Hymenobacter aerophilus</i>	Bact		WP_019949502.1	139	Short-BLUF	1667
				WP_019946446.1	145	Short-BLUF	1668
				WP_019946896.1	145	Short-BLUF	1669
433	<i>Hymenobacter norwichensis</i>	Bact		WP_022823388.1	142	Short-BLUF	1670
				WP_022823740.1	153	Short-BLUF	1671
				WP_022821755.1	146	Short-BLUF	1672
434	<i>Krokinobacter</i> sp. (strain 4H-3-7-5)	Bact	F4B036	YP_004431557.1	137	Short-BLUF	1673
			F4B057	YP_004431578.1	151	Short-BLUF	1674
435	<i>Marivirga tractuosa</i> ATCC 23168	Bact	E4TNQ3	YP_004053598.1	139	Short-BLUF	1675
436	<i>Mesoflavibacter zeaxanthinifaciens</i>	Bact		WP_010517271.1	142	Short-BLUF	1676
437	<i>Microscilla marina</i> ATCC 23134	Bact	A1ZRF7	WP_004156404.1	137	Short-BLUF	1677
438	<i>Mucilaginibacter paludis</i> DSM 18603	Bact	H1Y0M8	WP_008509682.1	140	Short-BLUF	1678
			H1YF64	WP_008506222.1	151	Short-BLUF	1679
			H1Y0M7	WP_008509681.1	137	Short-BLUF	1680
			H1Y8V0	WP_008509607.1	151	Short-BLUF	1681
439	<i>Nafulsella turpanensis</i>	Bact		WP_017730115.1	142	Short-BLUF	1682
440	<i>Pedobacter</i> sp. BAL39	Bact	A6E9F4	WP_008239021.1	152	Short-BLUF	1683
440	<i>Polaribacter dokdonensis</i> MED152	Bact	A2TY78	YP_007671791.1	481	HTH-BLUF	1684
440	<i>Psychroflexus gondwanensis</i> ACAM 44	Bact	N1WKU3	WP_003440963.1	142	Short-BLUF	1685
440	<i>Psychroflexus torquis</i> ATCC 700755	Bact	K4IV57	YP_006868110.1	142	Short-BLUF	1686
440	<i>Segetibacter koreensis</i>	Bact		WP_018614590.1	151	Short-BLUF	1687
440	<i>Spirosoma linguale</i> DSM 74	Bact	D2QRB5	YP_003388468.1	142	Short-BLUF	1688
			D2QVZ0	YP_003391771.1	137	Short-BLUF	1689

441	<i>Spirosoma spitsbergense</i>	Bact		WP_020603065.1	152	Short-BLUF	1690
	<i>Spirosoma spitsbergense</i>	Bact		WP_020601880.1	152	Short-BLUF	1691
442	<i>Terriglobus saanensis</i> ATCC BAA-1853	Bact	E8UXB9	YP_004184137.1	153	Short-BLUF	1692
443	<i>unidentified eubacterium</i> SCB49	Bact	A6ENE1	EDM45157.1	133	Short-BLUF	1693
444	<i>Winogradskyella psychrotolerans</i>	Bact		WP_020894508.1	136	Short-BLUF	1694
445	<i>Zobellia galactanivorans</i> DSM 12802	Bact	G0L2R9	YP_004735541.1	145	Short-BLUF	1695
			G0KZL8	YP_004737334.1	147	Short-BLUF	1696
446	<i>Zunongwangia profunda</i> SM-A87	Bact	D5BH98	YP_003583468.1	133	Short-BLUF	1697
447	<i>Solibacter usitatus</i> Ellin6076	AcidoB	Q01S10	YP_827845.1	141	Short-BLUF	1698
448	<i>Lentisphaera araneosa</i> HTCC2155	Lent	A6DQ35	WP_007279966.1	132	Short-BLUF	1699
449	<i>Chthoniobacter flavus</i> Ellin428	Verr	B4D369	WP_006980682.1	157	Short-BLUF	1700
450	<i>Coralimargarita akajimensis</i> DSM 45221	Verr	D5EM63	YP_003549393.1	148	Short-BLUF	1701
451	<i>Verrucomicrobiae bacterium</i> DG1235	Verr	B5JMC0	WP_008104971.1	141	Short-BLUF	1702
			B5JJ76	WP_008103776.1	157	Short-BLUF	1703
452	<i>Leptonema illini</i> DSM 21528	Spi	H2CIX2	WP_002774553.1	261	BLUF+GAF ?	1704
453	<i>Turneriella parva</i> (<i>Leptospira parva</i>) ATCC BAA-1111	Spi	I4B432	YP_006439545.1	353	BLUF+GGDEF	1705